FLORIDA® WILDLIFE

January-February 1985

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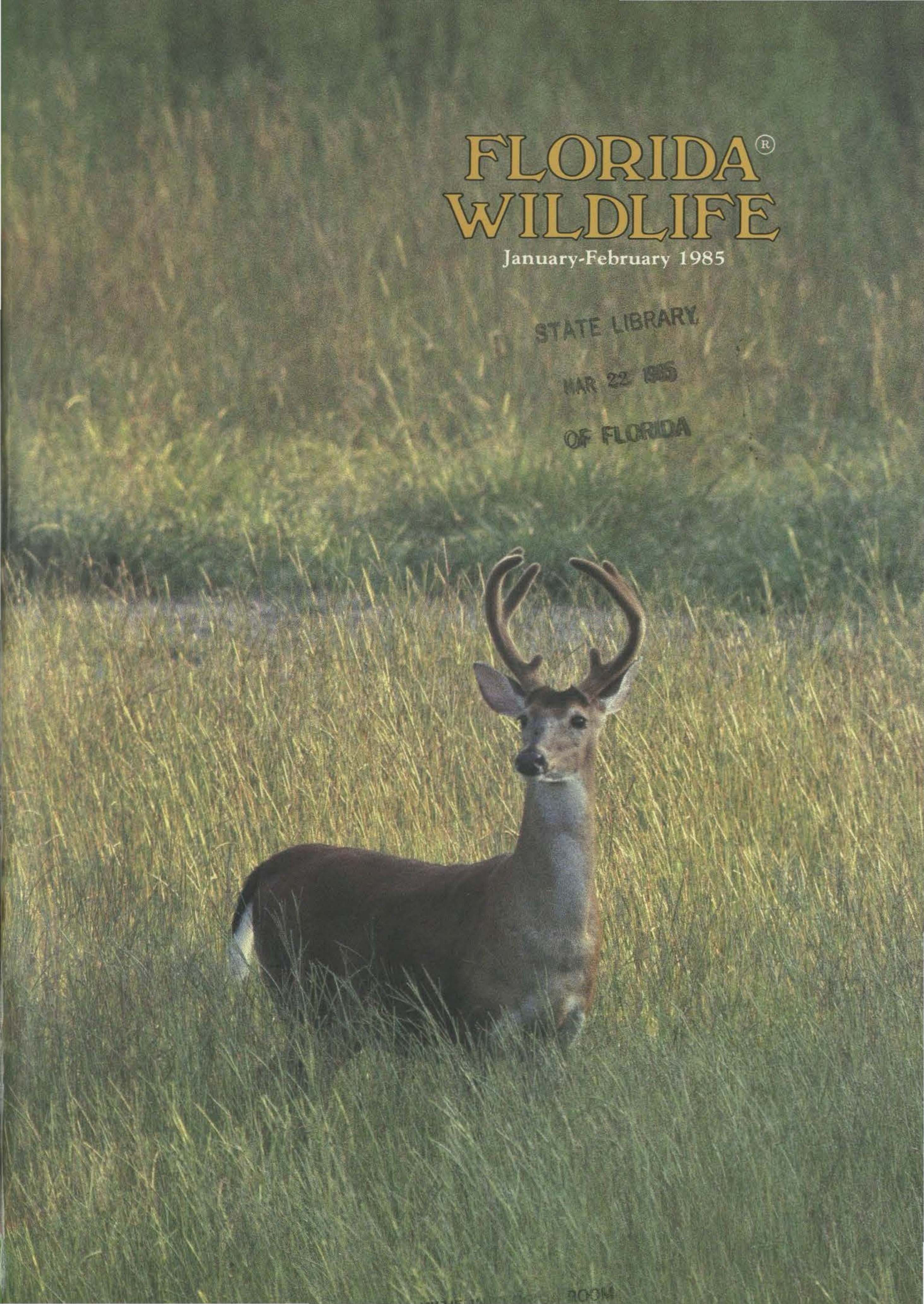

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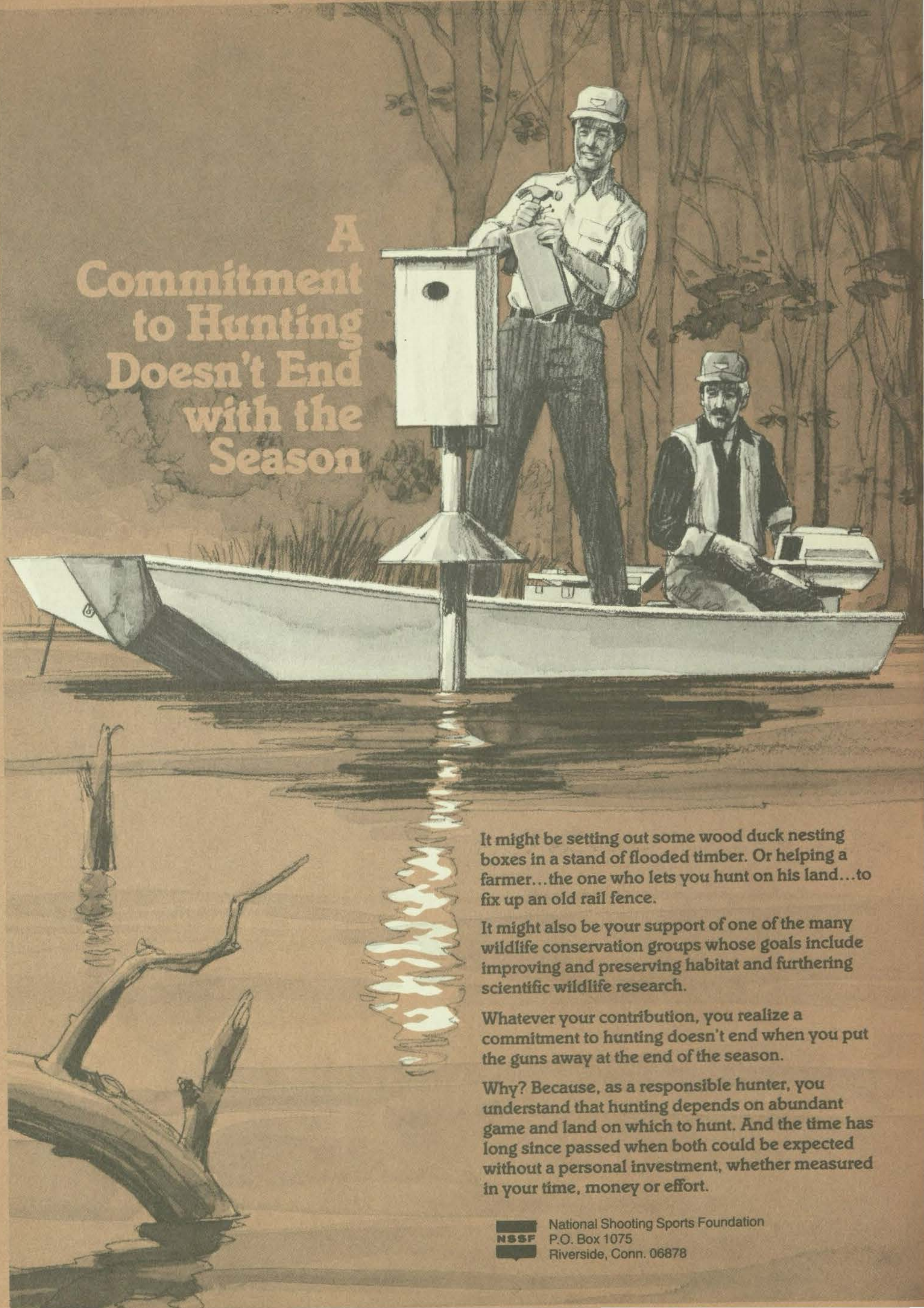
A Commitment to Hunting Doesn't End with the Season

It might be setting out some wood duck nesting boxes in a stand of flooded timber. Or helping a farmer...the one who lets you hunt on his land...to fix up an old rail fence.

It might also be your support of one of the many wildlife conservation groups whose goals include improving and preserving habitat and furthering scientific wildlife research.

Whatever your contribution, you realize a commitment to hunting doesn't end when you put the guns away at the end of the season.

Why? Because, as a responsible hunter, you understand that hunting depends on abundant game and land on which to hunt. And the time has long since passed when both could be expected without a personal investment, whether measured in your time, money or effort.

NSSF
National Shooting Sports Foundation
P.O. Box 1075
Riverside, Conn. 06878

FLORIDA® WILDLIFE

Florida Game & Fresh Water Fish Commission
Publisher

Dedicated to the appreciation and enjoyment of our wildlife heritage, and to a fuller understanding of efforts directed toward the protection, restoration, enhancement and wise use of our natural resources.

Volume 39, No. 1 **January-February 1985**

NOTICE: The previous serial issue (November-December 1984) was identified as "Volume 38, Issue No. 4." This issue has been numbered to synchronize our serial numbers to the calendar year volume binding standard.

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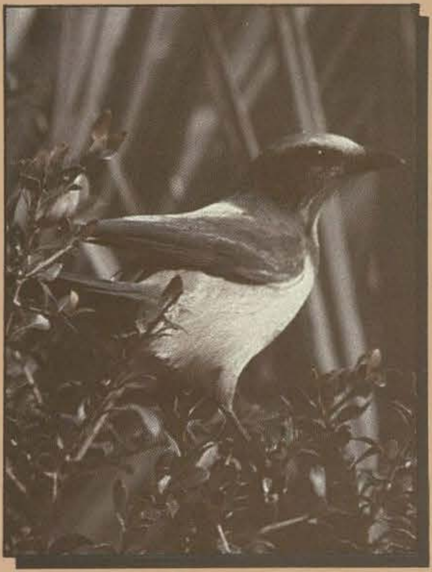

Coastal Scrub, page 22.

THE COVERS

Our front cover, a white-tailed buck deer, was taken by Barry W. Mansell. See page 20 for more of his deer pictures. Our back cover was taken by John Waters Jr. See page 38 for the story behind this picture that became a poster.

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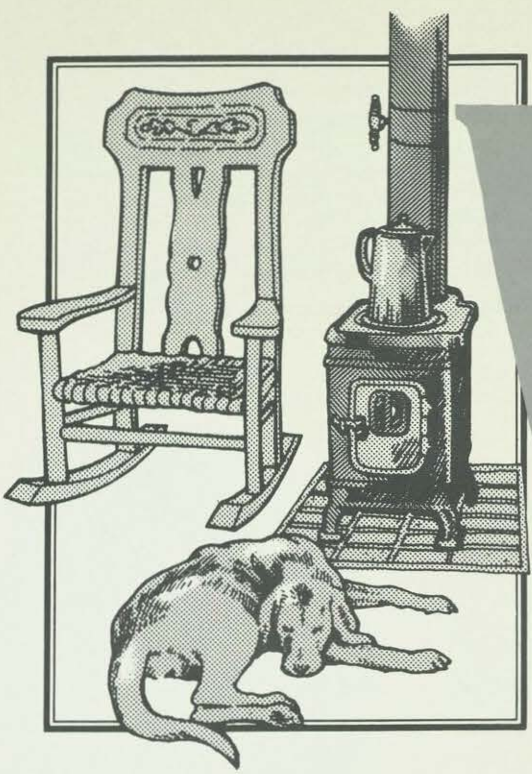


WOOD SMOKE

By Biff Lampton

"Instant Experts"

I read with horror the other day, in an engineering report prepared for a Florida city, "...the white-tailed deer is an endangered species." I guess that will come as a shock to anyone who knows anything at all about deer in Florida, but it is a typical error often made by people who lack knowledge about wildlife.

Scratch any wildlife biologist and he or she will be quick to point out how many people are "instant wildlife experts." Deer hunters, some of them say, claim to be experts in animal reproduction, population estimation, sex ratio determination, habitat requirements and, most especially, *what is wrong* with present-day professional deer management strategies.

Many deer hunters are so "expert" about all these things that, instead of hunting, they stand around the check station all day arguing with a biologist.

I can understand a deer hunter, especially a good one, wanting to provide input directly to the professional who has been placed in charge of the sport. At least these experienced hunters are likely to have seen a few wild deer during their lifetimes. What I can't understand are all the other "instant experts" out there who have never come closer to a wild white-tail than they have to the on/off switch on their television sets.

Take the Everglades deer crisis of 1982 for example: When the announcement was made that a portion of the herd would be killed by hunters so the rest could be saved, instant experts sprouted from the woodwork. Suddenly, it seemed as if everybody "knew what to do" about the deer.

Most of these new experts seemed to believe the professional wildlife biologists didn't know what they were talking about. The "experts" were, however, filled with compassion for animals, which is good. We all need to have compassion for Earth's living things and do what we can to allow all of them to coexist within the dictates of their natures. However, misplaced compassion can be bad.

Take Steve, for instance. Steve is a turkey hunter and there is nothing more he enjoys than outfoxing a wary old gobbler during the spring hunting season, yet he is full of compassion for his game. He knows that increased "progress" within his home state of Mississippi might mean fewer turkeys will live there in the future—not because of hunting so much as because of loss of habitat.

One day not long ago, he was driving down a country road when he noticed a big gobbler hung up in a hog wire fence, the woven kind with large rectangles. Steve pulled over and approached the bird, watching as it pushed against the wire, apparently trying to get through the fence from the other side. Wondering why it didn't just fly over, he went back to his car, got a blanket, opened the gate and went inside the fence. Then he threw the blanket over the bird.

After being beaten black and blue by the turkey as it flapped its wings desperately, Steve finally managed to wrap it in the blanket and examine it. Something was wrong with its wing feathers but, knowing a turkey could likely outrun most predators and also knowing its feathers would grow back in time, he put it in his car and drove far away from any hog wire fence before letting it go safely back into the wild.

A few weeks later, he called on a farmer who lived near where he had rescued the bird, to peddle an insurance policy to him. After successfully concluding a deal, they sat down for a cup of coffee.

"Sure wish I'd had this policy a few weeks ago," the farmer said as he sipped from his cup. "I had a prize turkey out in my big hog pen, and it just disappeared. If I'd had insurance then, I'd have been able to at least recover a bit of the money and time I put into the bird."

Steve stopped drinking his coffee and said he had to leave. The farmer escorted him out to his car, still talking about the turkey.

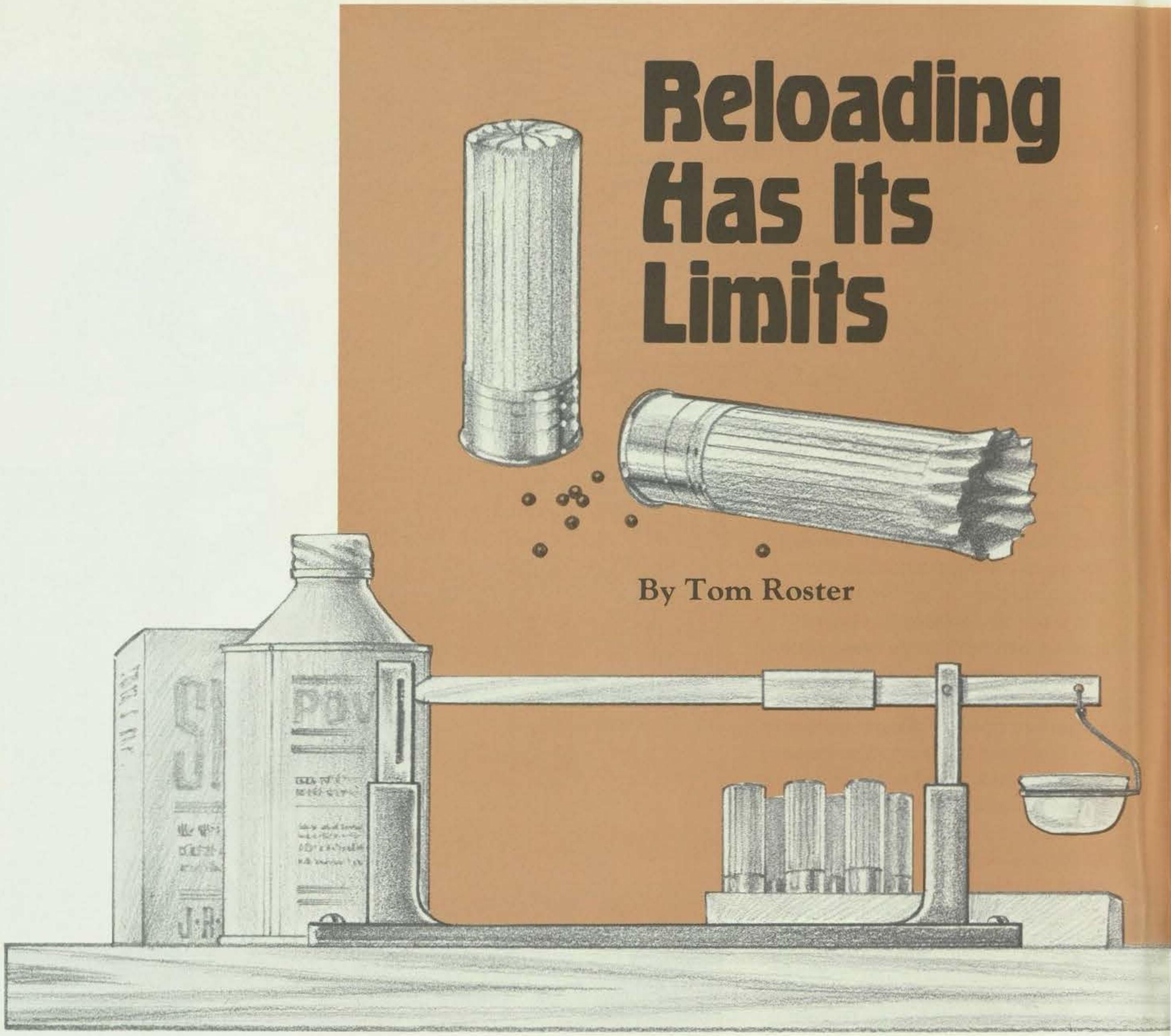
"Yep, I really couldn't understand how that turkey just *vanished* like that," the farmer continued. "I had clipped his flight feathers so he couldn't get over the fence. It was just like he was swallowed up by something.

"There were no drag marks or anything like there would have been if a bobcat had got him."

Steve cranked his car and put it into gear, saying he really had to go then.

"Well, you take care," the farmer said. "My pleasure doing business with you. Maybe next year the gobbler I'm raising'll win a blue ribbon at the county fair. I'll sure sleep better knowing if he disappears, I'm covered by insurance." □

Reloading Has Its Limits



By Tom Roster

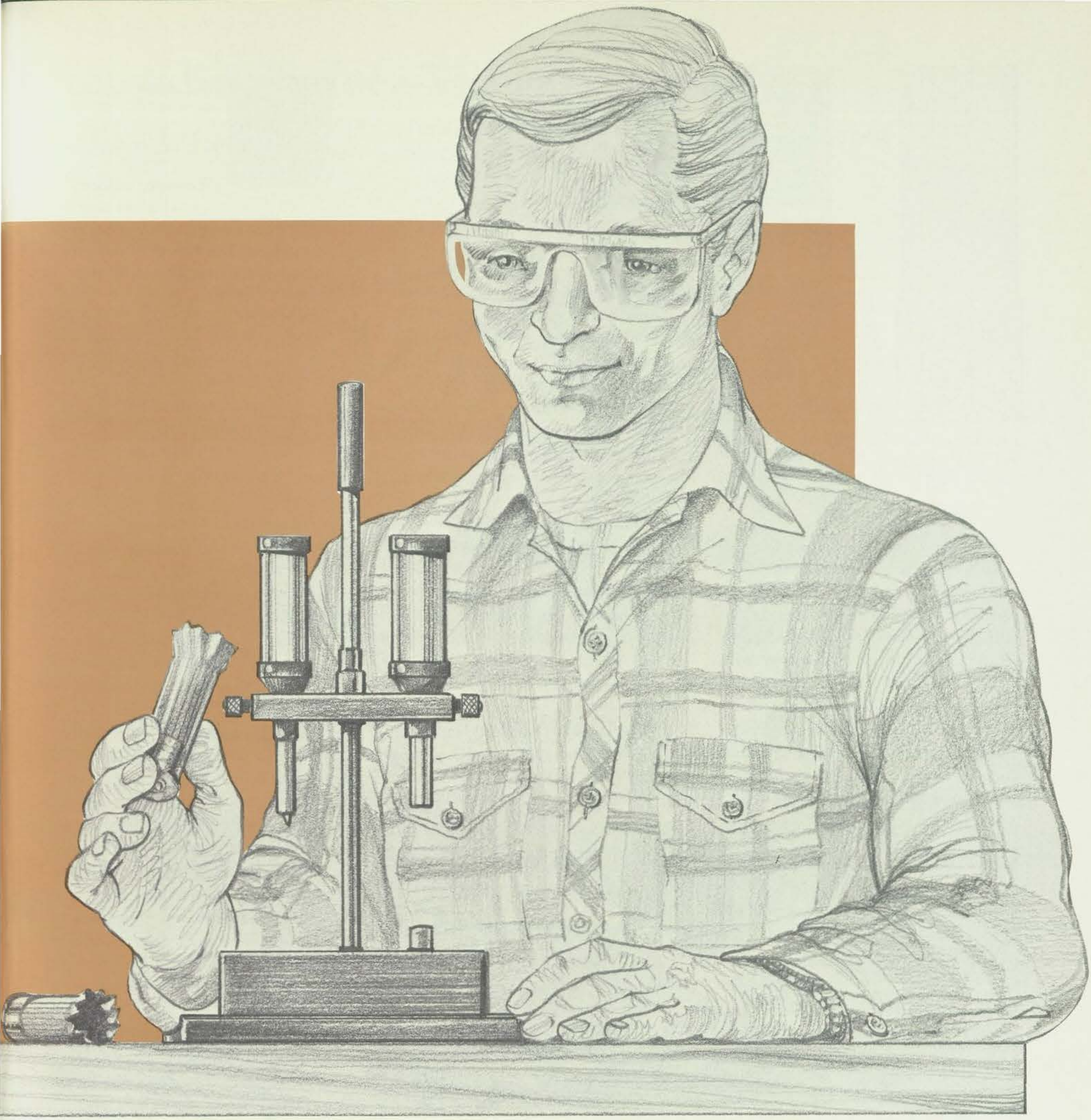
Shooting sportsmen who reload their own shot shells are often prone to reload their hulls to the bitter end. After all, the more reloads you can squeeze from a hull, the more money you save. And with today's high ammunition costs, any savings is welcome.

I agree modern one-piece plastic hulls can be reloaded well into the double digits before they give out. I also recognize that the more times you load a hull, the more you reduce your overall ammunition costs. But, unfortunately, the ballistics produced by a hull degenerate each time you reload it.

At some point you either have to make allowance for this in your reloading recipe or stop reloading the hull at the point where the ballistics produced are no longer similar to those of a once-fired hull.

The ballistics of the matter boil down to this: the resistance of the crimp has a great deal to do with the quality of and consistency from shot to shot of the powder burn you achieve and, to a certain extent, the quality of the patterns you achieve. The more you reload a hull, the more flexible and cracked the crimp becomes and the less resistance it has to the burning powder charge.

Before modern use of plastic wads, the role of the crimp was not

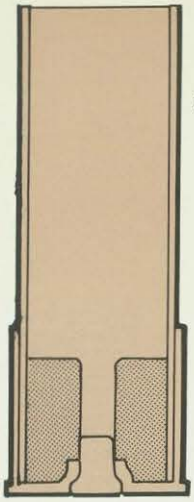


quite so important. Fiber and cardboard wads held the pressure applied to them by the wad ram. When the burning charge applies pressure to the wad, the wad provides enough friction against the hull to hold that pressure on the powder.

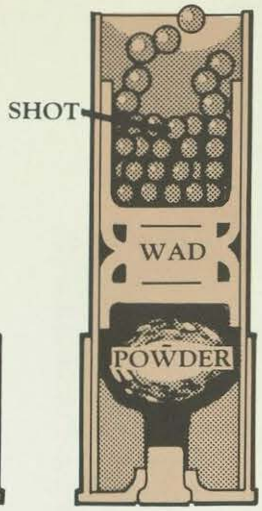
Not so with plastic components. Pressure can be applied to a plastic wad but, as soon as the wad ram is withdrawn, the slippery wad pops back up. This results in almost no pressure on the powder. Instead, today's shells rely greatly on the resistance offered by the crimp as the major source of "wad pressure." If you don't think crimp resistance is important, just try firing shot shells without a crimp. You'll get bloopers galore.

Also, the more times you load a hull, the more velocity and pressure drop. In addition, both velocity and pressure from shot to shot tend to drop because of the crimp becoming sloppier and sloppier and, to a certain extent, the hull interior becoming more ragged.

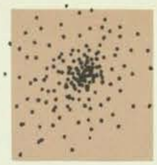
Variations from shell to shell increase because each shell wears and erodes somewhat differently; this phenomenon magnifies the more times your hulls are loaded. As a result, some wear out sooner than others. ▷



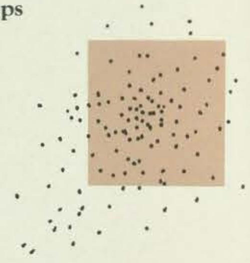
PAPER HULL WITH PAPER BASE WAD



PLASTIC HULL WITH INTEGRAL BASE WAD



Lowered velocity of reloaded shot shells does make a tighter shot pattern, above, but this does not offer any advantage as the overall performance drops significantly.



Published data for shot shell reloading are almost universally developed with once-fired hulls. If you want to duplicate the velocity and pressure listed for a given loading recipe, you must use the exact components listed in the recipe and your hulls must be in once-fired condition. If you follow the recipe to the letter, but are reloading a hull fired 10 times, you are *not* developing the velocity and pressure levels listed. Your velocities and pressures will be quite a bit less.

How much less? Well, I've seen velocity fall off as much as 125 fps (feet per second) and 4,000 lead units of pressure from a hull fired once to one fired 10 times. And I've seen shot-to-shot velocity fluctuations vary as much as 175 fps for hulls fired 10 times.

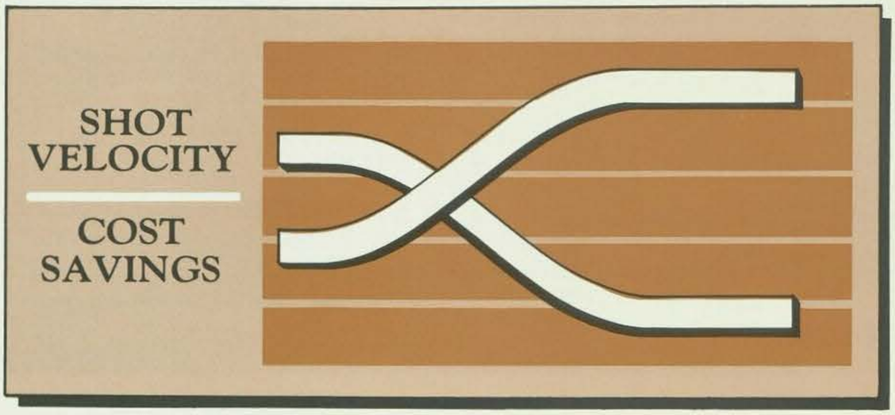
These velocity and pressure drops can affect your shooting. They are much less critical at close-range clay target games such as skeet or for close-range bird hunting, but they become much more important for leads at long-range shooting and for the longer handicap yardages of trap shooting.

Generally speaking, leads for shots under 40 yards are not significantly affected by velocity variations up to 150 fps. But this same fluctuation in velocity can affect leads enough to cause misses at clay targets or hits at the rear of fast-flying game birds when shooting over 40 yards.

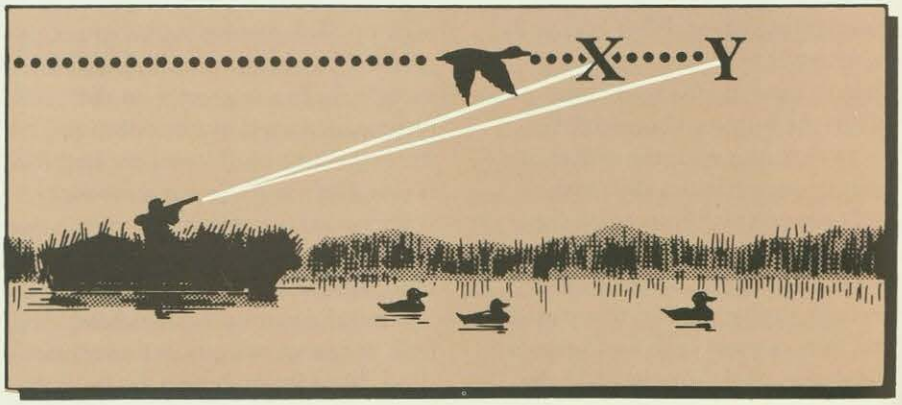
Pressure fall off can also lead to blooper loads, especially during cold weather when powder becomes more difficult to ignite. And if you're loading slow-burning powders in hunting loads anyway, the combination of this powder, cold weather and subpressure levels can produce serious ignition problems.

The only advantage to drops in velocity and pressure is increased pattern density. This happens because shot is deformed less upon ignition, but without dependable velocities, denser shot patterns are not that much of a benefit.

Given these circumstances, I always advise that, if you want high-quality loads that will give top performance, don't use a one-piece plastic hull more than five times or a two-piece hull more than three times. ☐



As shot shells are reloaded and refired, the velocity of the shot decreases. How much depends on the type of shell casing and the number of times it has been used. Longer leads must be made to compensate for this loss of performance.



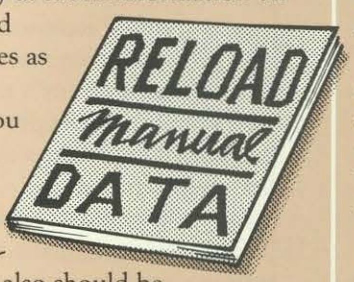
EDITOR'S NOTE: Tom Roster is a nationally recognized ballistics expert and has conducted extensive research in both the field and laboratory. He is also an expert shooter and shooting instructor.

Reloading Safety Tips

By John Waters Jr.

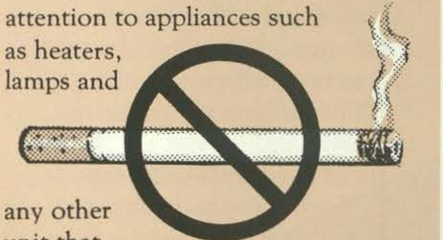
Reloading your own shotshells or cartridges can make your shooting sport considerably more economical, and pleasurable. However, reloading is a process that requires strict attention to safety and exactness.

Before attempting to reload any ammunition, be sure to have all the proper tools and equipment and a reloading manual on hand. Read and study as much information on safety and techniques as you can before you begin. Manuals provided by manufacturers also should be studied before using their equipment.



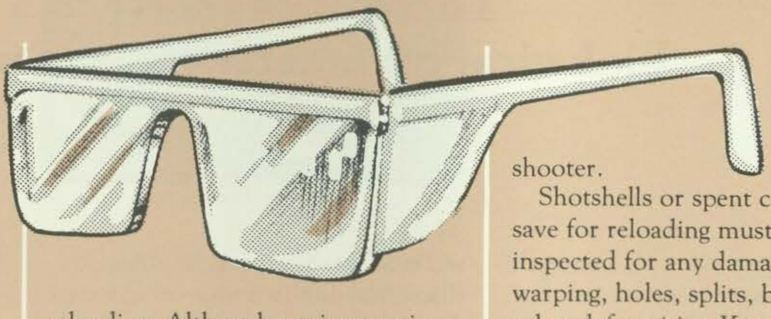
One of the most important things to remember is that the materials used are dangerous. An accident with these materials can leave you seriously injured. Primers are sensitive to shock and percussion, and powders ignite and burn rapidly.

Never smoke while handling primers or powders, and pay particular attention to appliances such as heaters, lamps and any other unit that can produce heat or sparks. They must be kept away from the explosive materials at all times.



All primers, powders, shot and bullets should be stored out of reach of curious children. A locked storage cabinet is strongly recommended.

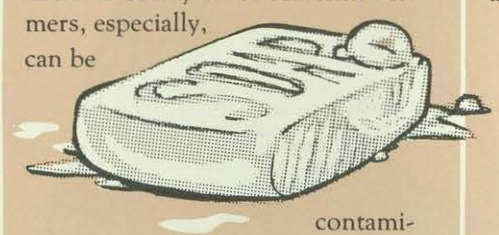
Consider your safety as well as the safety of others. Always wear a good pair of safety glasses when reloading. Although a minor accident may not cause extensive damage to your working area or gear, even a small explosion can send projectiles into the eyes.



Never reload when you are tired or under the influence of alcohol or any medications that might affect your judgment or coordination. Reloading must have your uninterrupted, undivided attention.

Don't eat while handling lead bullets and shot. Lead is poisonous and, when ingested, accumulates in your body. Repeated ingestion of even very tiny amounts can build up to levels which can result in very serious health problems, including permanent brain damage.

Be sure your hands are clean, dry and free of any oil or solvents. Primers, especially, can be contaminated by very small amounts of solvents or oils, and, as a result, can cause misfires.

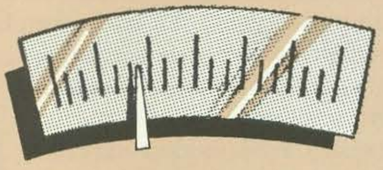


Never vary the amounts of shot or powders indicated in the recommended reloading recipes. Overloading powders can be extremely dangerous. Underloading can result in lowered performance in shotshells, and, in cartridges, can result in the bullet sticking inside the bore of the barrel or, even worse, an underloaded cartridge can explode, causing great damage to the gun or serious injury or death to the shooter.

Shotshells or spent cartridges you save for reloading must be carefully inspected for any damage such as warping, holes, splits, bulges or other deformities. Keep them clean, dry and free of oil or solvents. Discard any shell or brass casing not in excellent condition.

Also use the right equipment for the shells or cartridges you reload. There have been changes in technology and methods which necessitate use of the tools and equipment specifically made to reload modern ammunition.

Charge bars and their bushings greatly simplify measurement of both powders and shot. When choosing a bushing, always double check to ensure you are using the right one. A scale should also be used to confirm the bushing is measuring out the exact recommended amounts of both powder and shot.



Your scale must be accurate. Reloading recipes frequently call for weight measurements down to a tenth of a grain. Only a scale specifically made for the job is recommended.

By keeping safety in mind at all times, following exact procedures and using only the correct equipment for the job, your reloading can add extra pleasure to your shooting enjoyment. ☐

Monitoring the Florida Duck

These ducks serve as a biological barometer for our wetlands.

By Fred A. Johnson

Waterfowl Biologist
Okeechobee Field Station

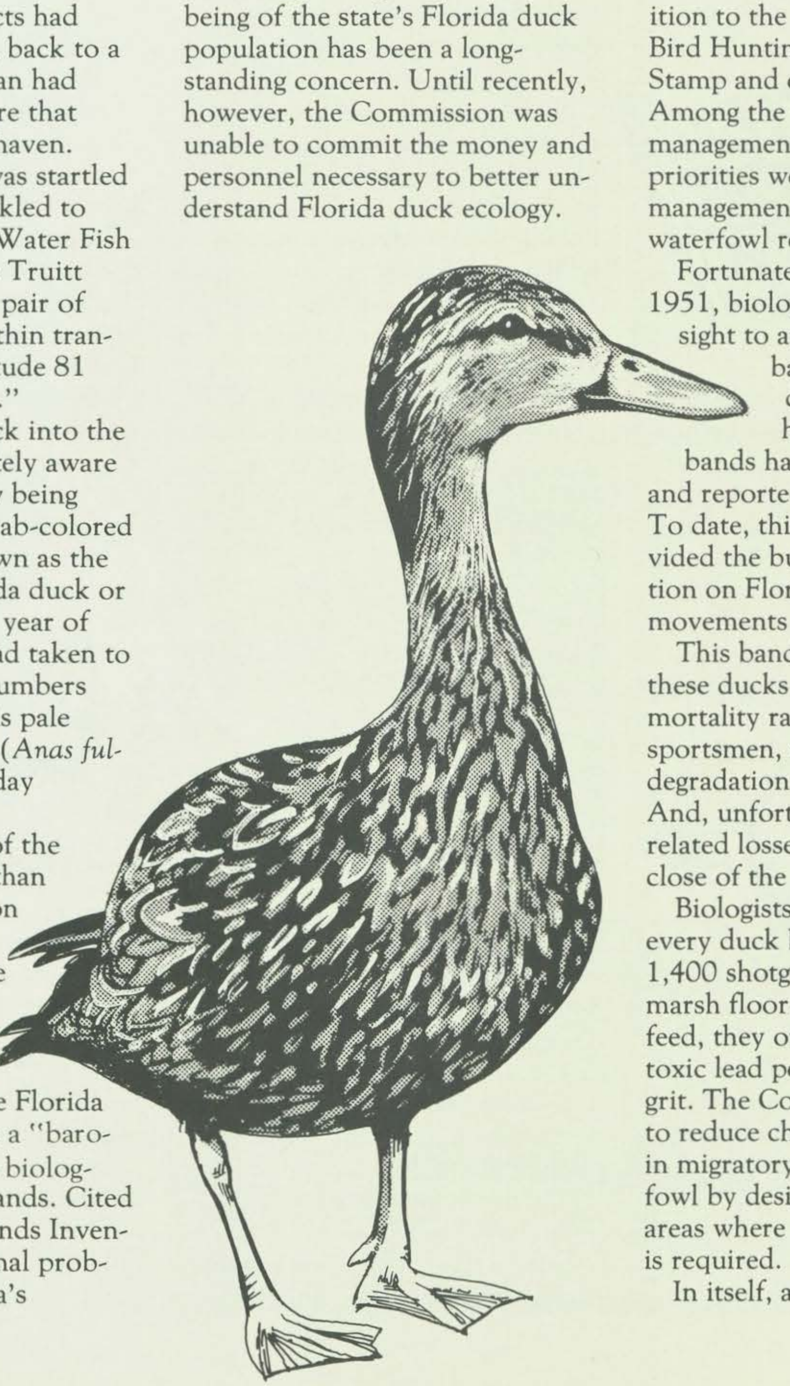
As I peered out the helicopter window at the prairies below, my mind wandered back to the time before drainage projects had scarred the landscape, back to a time when modern man had barely begun to explore that south Florida watery haven.

Lost in thought, I was startled when my headset crackled to life. Game and Fresh Water Fish Commission pilot Jim Truitt reported, "I have one pair of mottled ducks just within transect boundary—longitude 81 degrees, 44.4 minutes."

Suddenly thrust back into the present, I became acutely aware of the technology now being focused on a rather drab-colored duck, commonly known as the Florida mallard, Florida duck or mottled duck. After a year of planning, we finally had taken to the air to determine numbers and distribution of this pale brown or tawny duck (*Anas fulvigula*) in its modern-day environment.

The current status of the Florida duck is more than simply an academic concern. Prized by south Florida sportsmen, the species has always been an important part of the statewide waterfowl harvest. The Florida duck also may serve as a "barometer" for reading the biological health of our wetlands. Cited by the National Wetlands Inventory project as a national problem area, south Florida's wetlands continue to be drained, filled, channelized and otherwise degraded.

Among biologists, the well-being of the state's Florida duck population has been a long-standing concern. Until recently, however, the Commission was unable to commit the money and personnel necessary to better understand Florida duck ecology.



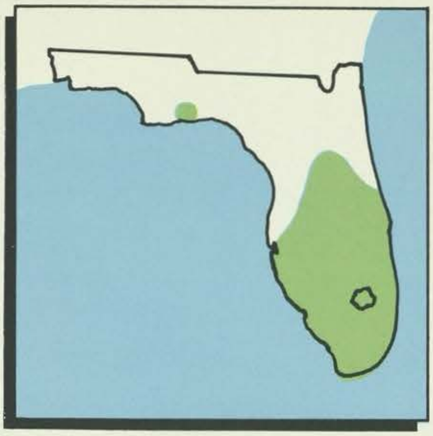
Beginning in 1979, all persons who hunted wild ducks in the state were required to purchase a Florida Waterfowl Stamp, in addition to the federal Migratory Bird Hunting and Conservation Stamp and other licenses. Among the fledgling waterfowl management program's top priorities were the improved management of our resident waterfowl resources.

Fortunately, as far back as 1951, biologists had the foresight to apply numbered leg bands to wild Florida ducks. Over the years, hundreds of these bands have been recovered and reported by duck hunters. To date, this program has provided the bulk of our information on Florida duck mortality, movements and behavior.

This banding data indicated these ducks experience high mortality rates. Predators, sportsmen, disease and habitat degradation all extract their toll. And, unfortunately, hunting-related losses do not stop at the close of the hunting season.

Biologists estimate that for every duck bagged, more than 1,400 shotgun pellets fall to the marsh floor. As Florida ducks feed, they often mistake the toxic lead pellets for seeds or grit. The Commission has sought to reduce chronic lead poisoning in migratory and resident waterfowl by designating duck hunting areas where nontoxic steel shot is required.

In itself, a high mortality rate



is not necessarily a problem for the Florida duck population, but waterfowl biologists have reason to believe that recent reproduction during the nesting season has not been sufficient to offset these high annual losses. The result is declining Florida duck numbers.

Alerted by our concern, the U.S. Fish and Wildlife Service (in 1983) selected the Florida mottled duck as a regional species of special emphasis. Soon after, the Commission's waterfowl management program received federal grants to improve Florida mottled duck management.

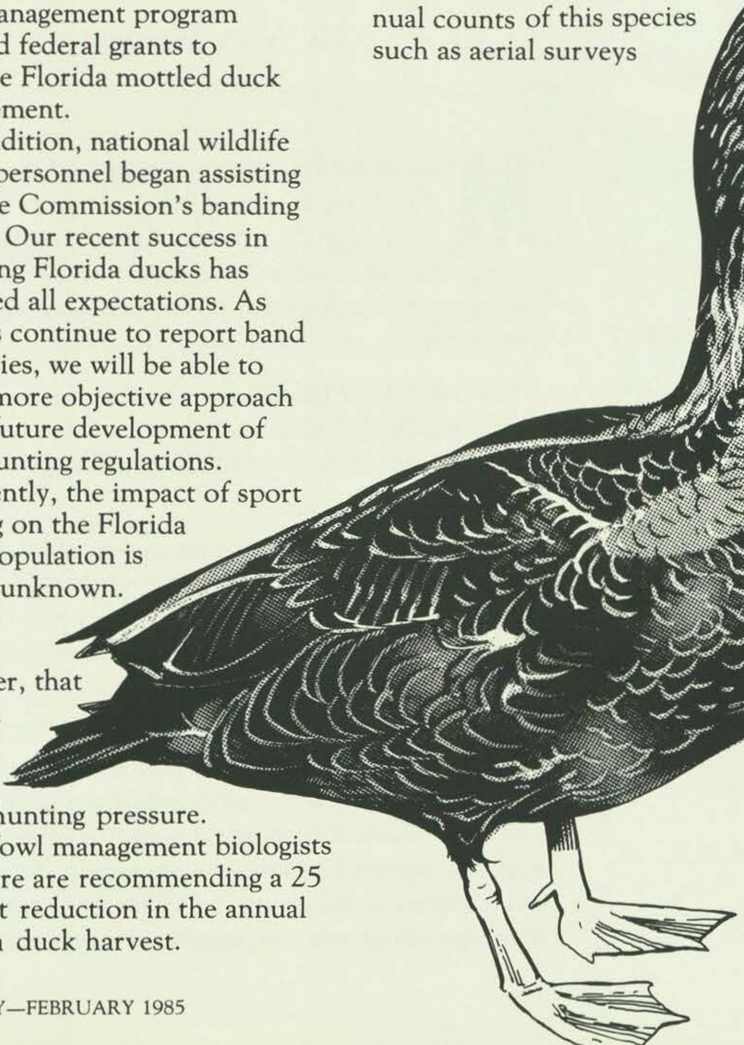
In addition, national wildlife refuge personnel began assisting with the Commission's banding efforts. Our recent success in capturing Florida ducks has exceeded all expectations. As hunters continue to report band recoveries, we will be able to take a more objective approach to the future development of duck hunting regulations.

Presently, the impact of sport hunting on the Florida duck population is largely unknown. We do know, however, that Florida ducks face heavy hunting pressure. Waterfowl management biologists therefore are recommending a 25 percent reduction in the annual Florida duck harvest.

The Commission assigned a maximum value of 100 points to the Florida duck during the 1984-85 regular waterfowl hunting season. Under those regulations, a hunter must stop shooting when his last duck puts him at or above 100 points. Therefore, harvesting just one Florida duck would legally end the day's hunt.

At its best, banding data can only provide indirect evidence of changes in Florida mottled duck status. Systematic, annual counts of this species such as aerial surveys throughout their range, would allow biologists to keep a finger tip on the pulse of the population.

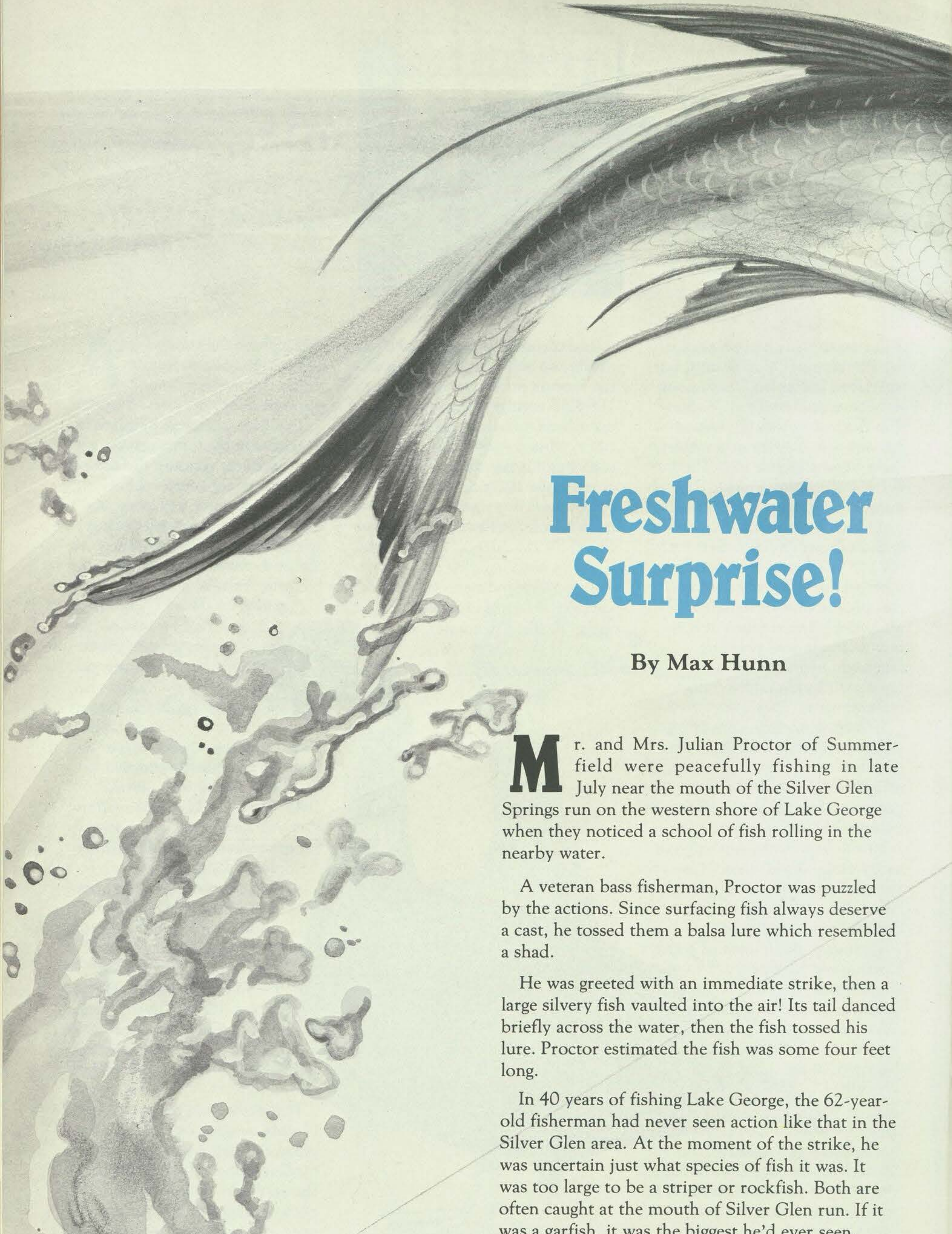
The U.S. Fish and Wildlife Service and the Commission are cooperatively funding the development of such aerial surveys. The first of three experimental surveys was conducted during spring 1984. Though refinements in survey techniques must be made, much has already been learned.



The success of new management initiatives will depend largely on the citizens of Florida. Duck hunters should learn to identify the Florida mottled duck before they take to the field. Enrollment in one of the Commission's hunter education programs can aid in identification of duck species.

Nonhunters can join sportsmen in supporting Florida mottled duck and other waterfowl management activities by purchasing the $3.25 Florida Waterfowl Stamp. Finally, and perhaps most importantly, Floridians can actively support attempts to protect or restore our wetlands.

Down through history, the Florida mottled duck has provided the state's residents with food and sport, and has added to the aesthetic quality of our environment. With your support, this tradition can continue. □



Freshwater Surprise!

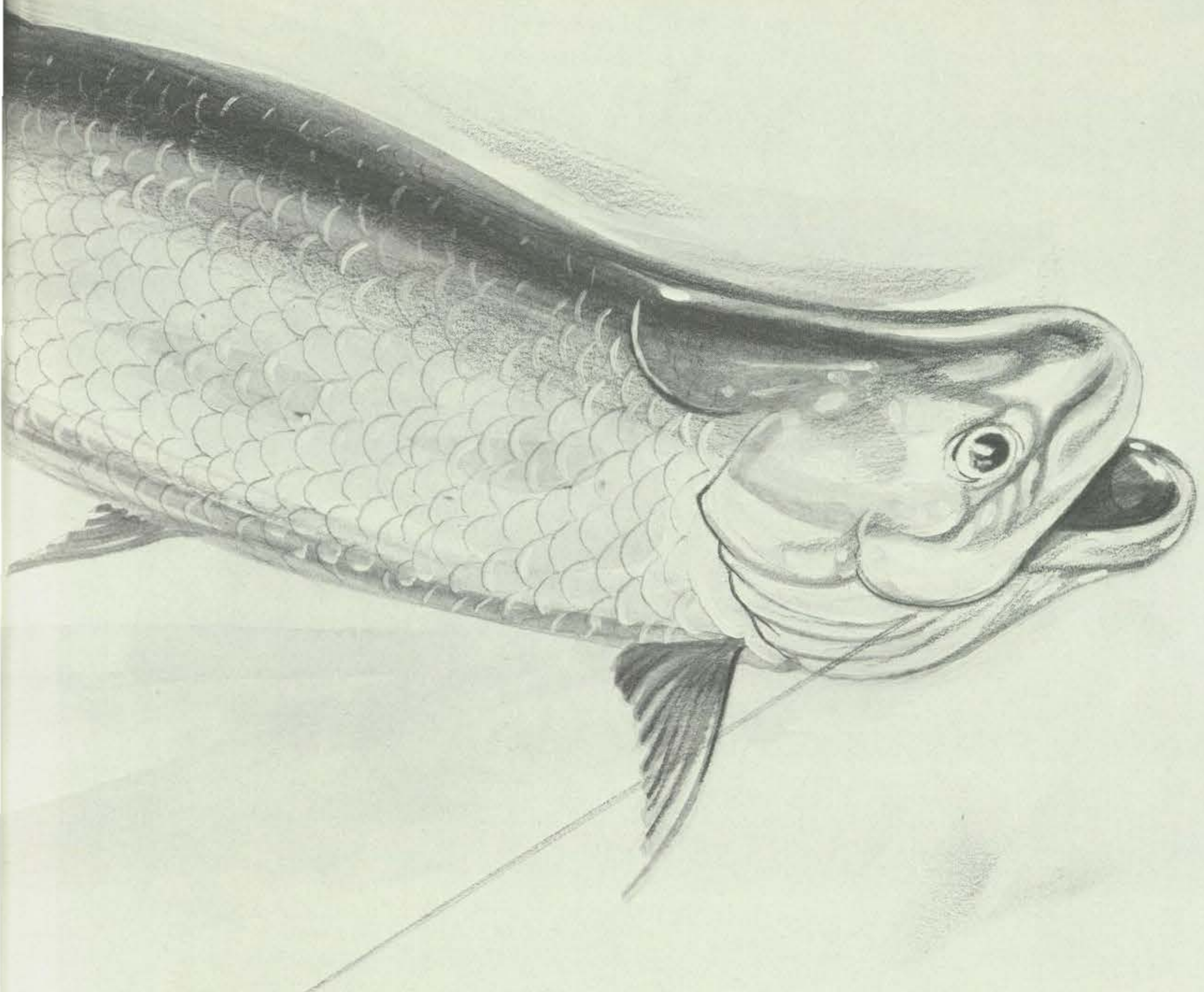
By Max Hunn

Mr. and Mrs. Julian Proctor of Summerfield were peacefully fishing in late July near the mouth of the Silver Glen Springs run on the western shore of Lake George when they noticed a school of fish rolling in the nearby water.

A veteran bass fisherman, Proctor was puzzled by the actions. Since surfacing fish always deserve a cast, he tossed them a balsa lure which resembled a shad.

He was greeted with an immediate strike, then a large silvery fish vaulted into the air! Its tail danced briefly across the water, then the fish tossed his lure. Proctor estimated the fish was some four feet long.

In 40 years of fishing Lake George, the 62-year-old fisherman had never seen action like that in the Silver Glen area. At the moment of the strike, he was uncertain just what species of fish it was. It was too large to be a striper or rockfish. Both are often caught at the mouth of Silver Glen run. If it was a garfish, it was the biggest he'd ever seen.

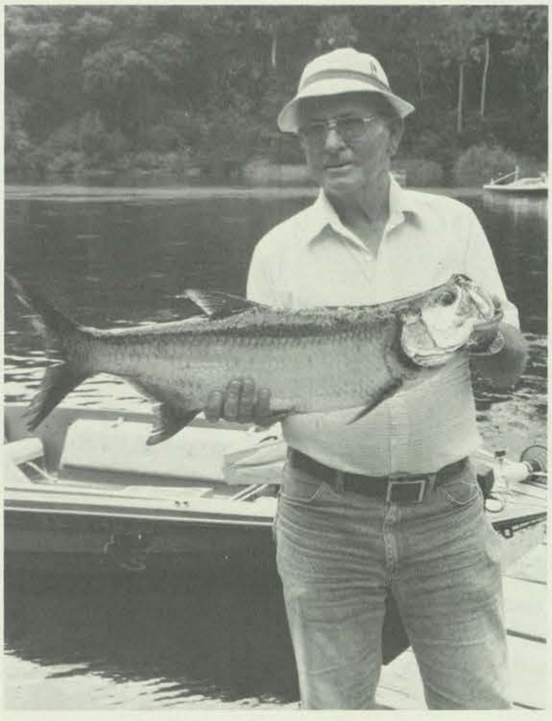


He cast the pink-bellied shad-like lure again and made another hook up. This time the hooks held and, for 20 minutes, Proctor was engaged in a violent struggle with a leaping, sounding, running fish—a tarpon.

Finally, he tired the fish and his wife managed to get the tarpon into an oversized landing net they had in their bass boat. The tarpon was estimated to weigh about 15 pounds. The first fish he'd lost was an even larger tarpon, he realized after landing the 15-pounder.

Proctor landed his roaming silver king using bass tackle—a 5-foot Fenwick graphite rod and a Lew's Speed Spool filled with 12-pound test line—tackle just a bit on the light side for tangling with leaping tarpon!

What the tarpon were doing in Lake George in late July, so far from the St. Johns River mouth at Mayport, has local anglers puzzled. It's approximately 150 miles from Mayport to Silver Glen. While tarpon do wander into brackish water, why they were at the mouth of Silver Glen run, which is as pure a fresh water as can be found, is an angling mystery. But the tarpon were there. □



Max Hunn-Photograph

Julian Proctor displays the tarpon he landed from an unusual spot—the fresh water of Lake George.

John Roberge-Photograph

When the moon gets right, so do the deer.

By Trisha Spillan

True to tradition, the opening of the 1984-85 deer season in northern Florida brought an abundance of frost and cold weather. What it hadn't brought during the first week was an abundance of success. But that, experts claimed, was fixing to change over the next week or so as the moon got right and so did the deer.

At least that's what the "experts" around the check stations at the Aucilla Wildlife Management Area were predicting one Thursday morning after deer season opened. Amid tales of missed shots and no shots, hunters were predicting things would start picking up over the next week to 10 days.

Deer hunting in this 172,541-acre wildlife management area southwest of Tallahassee had been under way for six days and, although more than 100 deer had been checked, old-time hunters weren't pleased with the harvest to date. The first two days of the season, only 61 bucks had come out of the still hunt area and 39 from the dog hunt area.

It's usual, they claimed, for the Newport check station in the still hunt area alone to record at least 100 deer over the opening weekend. Blame was placed alternately on the moon (too full) and the out-of-towners (too many).

But a little thing like the harvest not being high yet wasn't about to deter these hunters. Many have been coming to Aucilla for years and vie each year for the privilege of being out in the pines come opening day.

Across US 98 from the Newport check station, the Division of Forestry's camping area had started filling up with trucks and travel trailers the week before opening day. License plates bore evidence of locals and down-staters, prepared to spend anywhere from two days to two weeks at their favorite spot.

Aucilla, first established in 1953, is one of the oldest and most popular of Florida's wildlife management areas. Today, it is divided into two sections: one for still hunting and the other for dog hunting. The still hunt area is located south of US 98 and stretches across two counties—Wakulla and Jefferson. Dog hunting takes place primarily north of the highway and in Taylor County.

Quotas for the first nine days of hunting on either of the sections fill up rapidly and now, with quota permits transferable, hunters hang around check stations after the first two days looking to utilize quota permits from those who have finished their hunting trips.

Aucilla is made available to Florida sportsmen through the generosity of three major landowners—St. Joe Paper Company, Buckeye Cellulose Corporation and Container Corporation of America.

These three companies, along with others of their kind, are responsible for providing Floridians with thousands of acres of land for hunting, fishing and other recreational opportunities. For this, the landowner receives a small lease payment from the Game and Fresh Water Fish Commission. St. Joe Paper Company puts its lease receipts back into the Aucilla Wildlife Management Area.

"Using these funds, we have been able to purchase new equipment such as tractors for use on the area," explained Art Stockle. He is a regional wildlife biologist for the Commission who works closely with St. Joe and the other timber companies which provide the hunting lands.

"Lease payment monies have also gone into helping buy fertilizer for food plots and even obtaining three-wheelers, which have proven very helpful in conducting deer track counts on the area," he added.

In addition, St. Joe personnel work closely with the Commission on other activities such as road maintenance and habitat improvement. Stockle said the company has also established a good controlled burning program which has helped maintain deer habitat.

Deer is the primary species sought on Aucilla, and right now, the herd is in good shape, Stockle said. In the approximately 35,000-acre still hunt area, he estimates there's about one deer per 30 acres. The ratio is one deer per 75 acres in the dog hunt area.

Small game fanciers find the area good for squirrel hunting, with close to 3,000 checked out of the area last year. Wild hog hunting, which has always been popular, still remains so, although the population has started to decline. The biologist said no one knows why this has been occurring, although many "check station experts" believe wild hogs are moving into nearby St. Marks National Wildlife Refuge.

The Commission had been stocking wild hogs on the Aucilla area over the past five years but that is being discontinued. "We elected not to get into a put-and-take hunting system with wild hogs," Stockle explained.

One species which seems to be increasing is the black bear. With Aucilla's swamps and bottomland hardwoods, bears seem to have found a place to thrive. That may or may not be good, Stockle said, ▷

Although opening weekend at Aucilla WMA was not as productive as in previous years, some hunters did bag their buck.

depending upon which hunter you talk to.

At least one sportsman, however, probably isn't too crazy about the increase. He told wildlife officers this year of walking through the dark to his tree stand after putting "essence-of-deer-in-heat" on the bottoms of his boots. Safely situated among tree limbs, he heard a rustling in the brush below. Thinking it was just a big wild hog, he was extremely upset to discover his hog was really a bear which had been following his tracks. The bear, after poking around in the limbs searching for the boots, finally gave up its quest and ambled off. The hunter, however, didn't amble as he quickly exited the area with a tale for telling around the campfire.

A drive through Aucilla on a crisp fall morning revealed a wealth of deer and hog tracks in the deep sandy roads. Here and there were signs of wild turkeys, legal to take only during the spring season.

Along the way were scattered what looked like old roads now posted with official signs saying they were closed to vehicular traffic.

"These," Stockle explained, "are roads that have been 'put to sleep.' That's the term St. Joe uses when they have finished using them."

After the roads are put to sleep, the Commission has been posting them and planting the road beds with winter rye as food plots for deer. Although the grass was green but sparse, deer tracks criss-crossed the dirt. Hunters had some success this year, officers reported, taking deer which have come from the pines to graze on the plots.

"I have even seen hunters sitting in chairs right in the middle of these plots waiting for deer to show," one officer said. "They spot the tracks, then just sit and wait, convinced a deer will be back at any minute to feed again."

Next year, Stockle said, the Commission will stabilize the road beds more and plant permanent grass for the wildlife. Driving past clearcut areas, new growth is already sprouting. Here again, the deer come out to feed on the green shoots or among the palmettos.

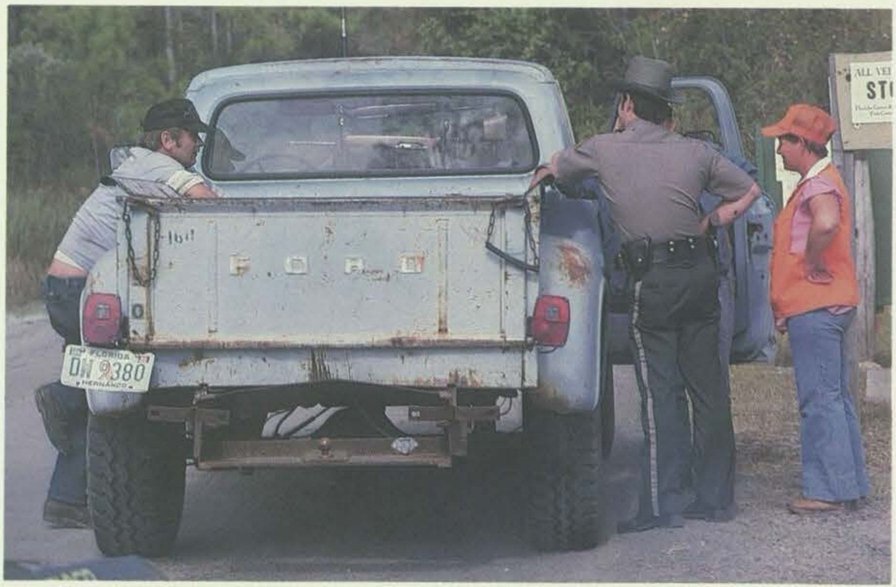
"I stopped to talk to one man who said he hadn't seen a deer all morning," a wildlife officer said. "We were right next to one of these clearcut areas when I looked out and said, 'well, what do you call them?' Sure enough, two deer were out there grazing on the grass and the man hadn't even seen them."

From coastal marshes along the Gulf of Mexico, Aucilla changes in character as it rolls inland. Marshes give way to bottomland hardwoods with tupelo, gum, oak and cabbage palm. These, in turn, evolve into uplands with water oaks, palmettos and pines, and then into sand pines on the high ridges.

On the Gulf of Mexico side, Aucilla abuts the St. Marks National Wildlife Refuge, a spot for wintering ducks that is probably rivaled only by Aucilla's own Hickory Mound Impoundment in Taylor County. This impoundment, provided through Buckeye Cellulose Corporation, not only provides excellent duck hunting opportunities, but also fishing and crabbing.

Aucilla is a special place to many Floridians, whether its Capt. Kyle Hill of the Commission who has been patrolling and working Aucilla for some 11 years or Sarah Yeats who has been the check station operator at check station 10 for the last five years, or the hunter who got twisted around and spent most of the morning trying to find his way out of the area.

Visit it and you're likely to find these three and other kindred souls enjoying the outdoors opportunities provided by this wildlife management area. ☐



A hunter stops at Check Station 10 to discuss his morning's hunt with Capt. Kyle Hill and check station operator Sarah Yeats. "Check station experts" also stop here to swap tales about this popular and productive hunting area.

John Roberge-Photographs

This Time, the Panther Survived

Ron Townsend Took the Time, the Team Responded, and Big Guy Was Saved

By Henry Cabbage and Trisha Spillan

No one will ever know if the motorist driving down US 41 in the Everglades one dark night last November saw what was struck. Maybe the driver thought it was a dog or maybe recognized the large tawny cat, but no matter, for this time, the Florida panther survived the collision.

It was shortly after daylight on November 2 when another driver, Ronald Townsend, was driving a truck along US 41 from Miami to Naples. Just a few miles outside Ochopee, he spotted the reflections of his headlights in a pair of eyes. He had seen eyes like those before—they were panther eyes.

Townsend could barely see beside the road in the predawn light, but he could tell the cat was injured. So, he turned his truck around and went back to investigate.

"There were some skid marks on the road there," Townsend explained. "It looked to me like it must have been a car or a pickup truck that did it."

Somehow the injured animal had managed to drag himself to the side of the road before collapsing beside a guardrail. When he sensed Townsend's presence, the panther strained, stood up and walked a few steps before he fell to the ground again.

"I've always liked panthers," the Naples businessman said, "so I decided to do whatever I could to help." Climbing back into his truck, he headed up the road to the nearby Florida Highway Patrol station. From there, calls were sent out and help was soon on its way.

Telephones rang at the West Palm Beach regional office of the Game and Fresh Water Fish Commission and at the Naples field office. Two wildlife officers were quickly dispatched to the cat's location.

John Roboski, project leader for the Commission's south Florida panther research, was in nearby Naples and, as soon as he got word, started in motion a rescue plan which had already been drafted for just such an emergency.

Personnel at the Naples office telephoned the University of Florida College of Veterinary Medicine (UFCVM) in Gainesville to notify the veterinarians of the injured panther.

Biologist Walt McCown and management specialist Mike Ramsey started gathering the drugs and medical supplies needed to help the injured animal, then sped to the scene. Meanwhile, a Collier County Sheriff's Office deputy helped control traffic and keep well-meaning individuals from spooking the animal.

By 10:30 a.m., McCown said, rescue personnel watched uneasily as the shaky panther crawled into a canal on the north side of the road, then swam toward a swamp. The panther could barely summon enough strength to pull himself even partially up the bank before he collapsed, his hind legs still dangling in the water.

It would take the UFCVM veterinarians a while to reach the rescue site so, in addition, Dr. Ned Johnston in Naples was summoned. Dr. Johnston is noted for his 15 years of experience in treating large exotic cats for circuses and tourist attractions. The rescuers felt confident he could help.

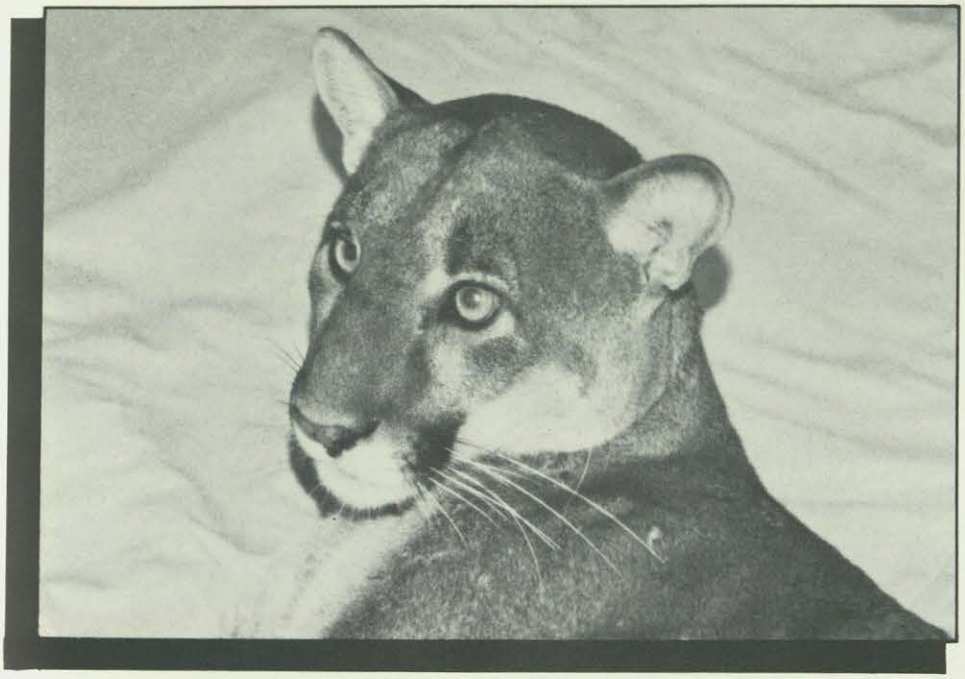
As Commission and National Park Service personnel watched the panther, Phil Murphy, a helicopter pilot with the park service, went to the Naples airport to pick up Johnston.

Murphy landed at the Ochopee field office some five miles away where McCown met Dr. Johnston and drove him to the site.

Dr. Johnston was worried the panther might injure himself trying to flee the people there to help him.

"The panther wasn't bleeding much by then," Dr. Johnston said, "but I think he had bled a lot before we got to him."

He decided to use a special dart



Dewey Weaver-Photograph

gun to tranquilize the panther before attempting to get close. "His respiration was rapid from the stress and shock," Dr. Johnston said. "A wild animal in shock like that...there was no telling what he might do."

After using the first tranquilizer dart, the rescuers waited 10 minutes to allow the drug to take effect. Then, taking a pole with a hypodermic syringe attached on its end, Dr. Johnston moved closer to the panther to try and give him another injection of tranquilizer.

"As soon as we touched him with that, he jumped at us," Dr. Johnston said. "We were standing chest-deep in the canal, but we hit him with another dart and scrambled out of there."

Another 10 minutes passed. The panther's respiration was still rapid (about 72 breaths per minute) but he appeared to be calm. Gingerly, rescue personnel moved in again with the syringe. After the third injection, the panther succumbed and was soon unconscious.

A small boat had also been unloaded from the helicopter. Carefully, the anesthetized cat was loaded into it and floated across the canal to the highway. As soon as it reached the pavement, Dr. Johnston began treating the panther for shock.

"Within a few minutes, his respiration was back down, around 16 to 18 breaths per minute," he said, "and they called in the helicopter." Dr. Johnston, pilot Murphy and biologist Roboski took off for Naples with the animal's head laying in Dr. Johnston's lap.

At 1:30 p.m., the helicopter landed on a parking lot near the St. Francis Animal Clinic at Naples and, moments later, the Commission airlifted two specialists, Drs. George Kollias and Melody Roelke, to Naples to assist Dr. Johnston.

At St. Francis, Dr. Johnston took x-rays of the cat and sutured his cut tongue. Both hind legs and one hind foot were broken. The main concern, however, was to stabilize the panther's vital signs.

By now, the panther had a name—Big Guy—courtesy of Dr. Johnston. The veterinarian said he had just dreamed he had seen a panther while fishing in the Everglades. In his dream, he called the cat "Big Guy" and he said later, "Lo and behold, the next day, there was this panther."

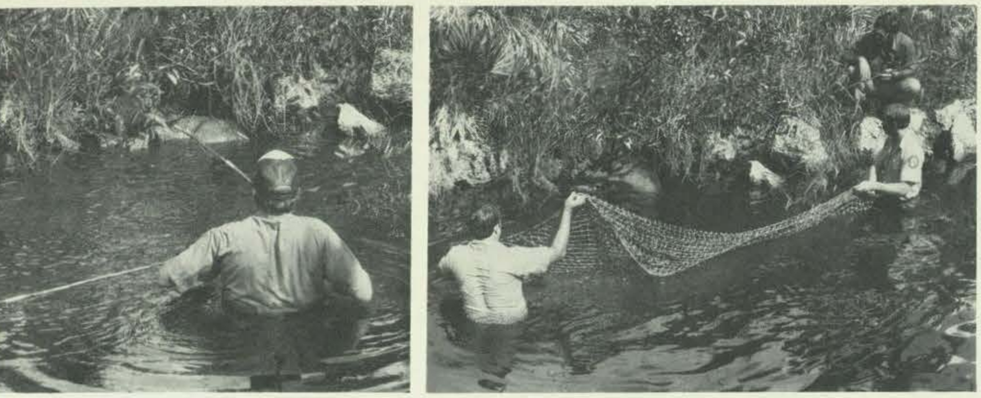
The three veterinarians readied Big Guy for his flight to Gainesville. That facility had the best possible conditions for surgery on his injuries.

Animal hospital staff members teamed up to load the still unconscious cat onto a stretcher and carry him to a waiting Commission vehicle. A Commission-chartered aircraft was ready at the Naples airport. Soon he and Drs. Kollias and Roelke were on their way north.

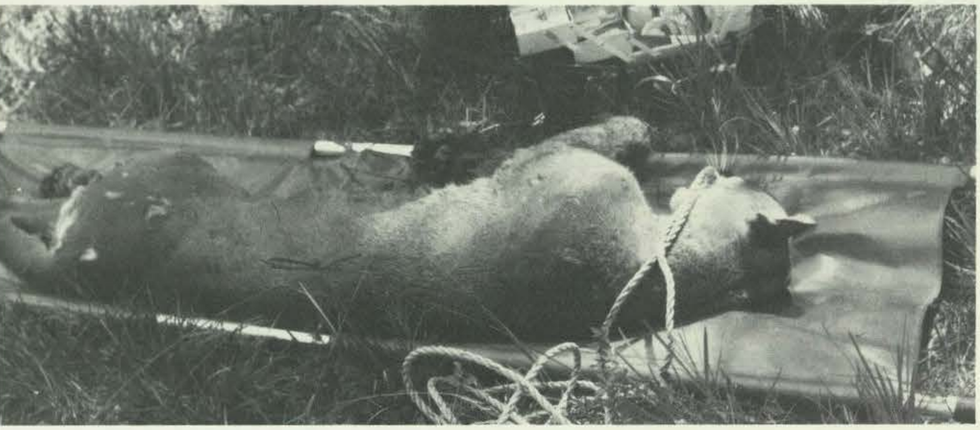
Meanwhile, the college was preparing to receive its patient. A van headed for the Gainesville Municipal Airport, ready to transport the panther to the animal clinic. Personnel from UFCVM were tracking down a donor for a panther blood transfusion. They found one in a small zoo at Camp Kulaqua, a church-operated youth camp at High Springs. This large captive-bred panther was rushed from the camp to the college and prepared for a one-liter blood transfusion.

The plane with its precious cargo touched down around 7 p.m., more than 12 hours after the first word of the injured panther had been received. The cat was whisked away to UFCVM's facilities and surgery began late that night.

Orthopedic veterinarians Mark Bloomberg and Gayle Donner worked to repair the worst injury, a compound fracture of the animal's left leg. A stainless steel plate was implanted to hold the broken bones together. Assisted by six other veterinarians, the two finished the ▷



The injured panther swam from the highway across a canal, but was unable to climb out of the water. It lay there until rescue personnel tranquilized it to capture it for treatment.



Eddie Lee Henderson-Photographs

A stretcher was used to safely carry the panther from the canal to the roadside, where veterinary treatment could continue.

operation early Saturday morning.

Big Guy was then safely placed in a cage in the clinic and monitored through the weekend. He came out of the first operation in good condition and, after resting and gaining strength, went back into surgery on Monday. That time, his right leg was the object of surgery, along with his broken foot. Again, stainless steel plates were implanted to help the broken bones heal.

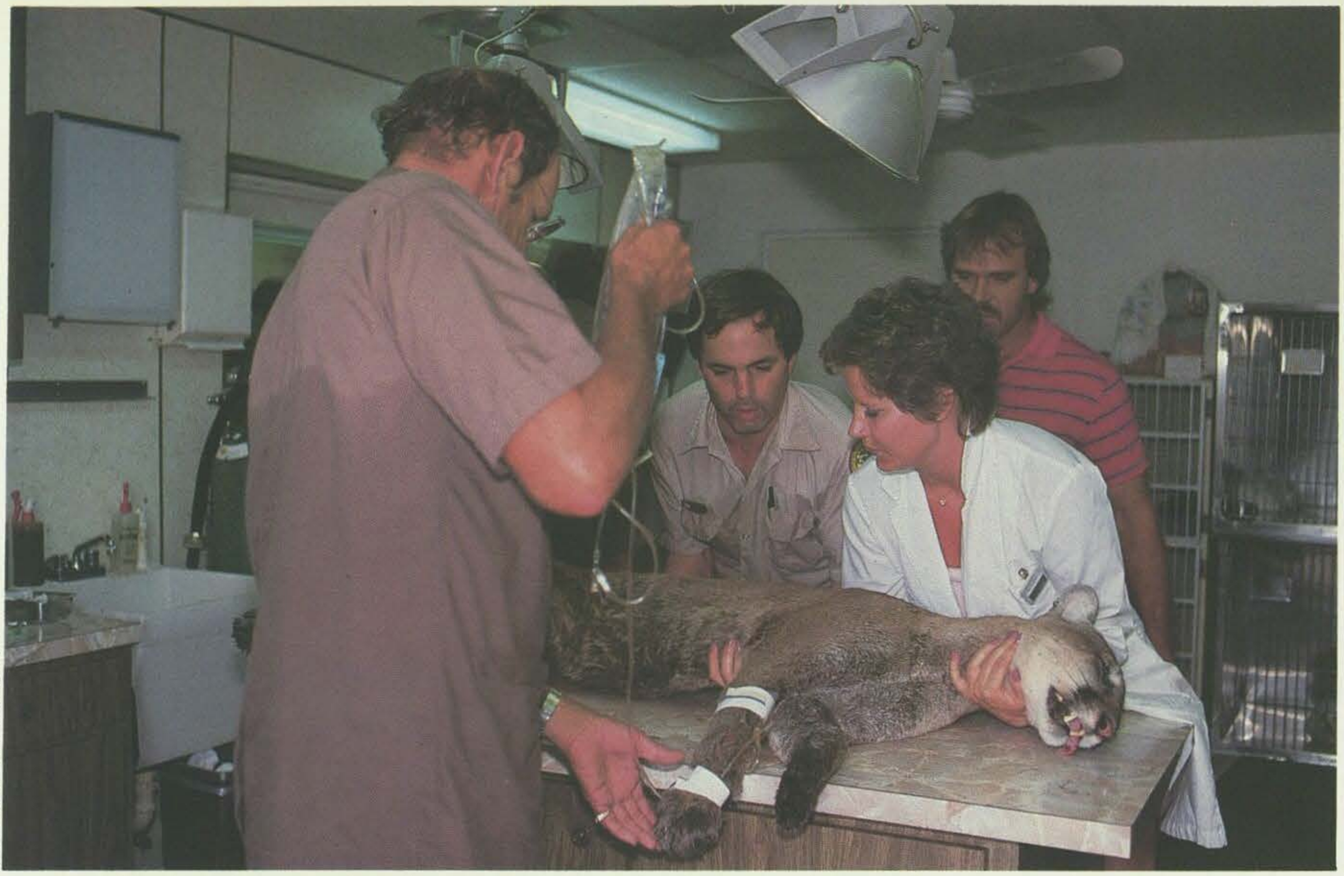
Veterinary personnel kept a close eye on the panther's progress. Soon, he began to sit up, eat and walk around. A four-week-old African deer, two cages away, occupied Big Guy's attention much of the time. His wounds began to heal.

After examining the cat, veterinarians estimated he was about three and a half years old, weighing in at about 125 pounds. Except for being hurt, he was in good physical condition.

As he healed, Big Guy became more active and aggressive. As he was able to move around better and began to use the injured legs, it became apparent that his recovery cage was too small.

Eric Strachan-Photograph

The rescue of the injured cat was a coordinated affair resulting from advance planning by the Commission. The National Park Service provided a helicopter and pilot to transport the panther to the St. Francis Animal Clinic at Naples.



Eric Strachan-Photograph

By the time the panther was moved to a veterinary treatment facility, it had lost blood and was in shock. Restoring lost fluids to the circulatory system was vital to saving its life. Dr. Ned Johnston was the first veterinarian to begin treatment.

On December 10, the cat was transported to a larger, more comfortable location at the Commission's Wildlife Research Laboratory. There he has remained in a specially designed facility, which allows the panther to use his muscles more and get the exercise he needs.

From the laboratory, the panther will be moved at least one more time; to a still larger, yet unnamed facility. Wildlife officials estimate it could be as long as a year before Big Guy completely recovers from his injuries.

Colonel Robert M. Brantly, executive director of the Commission, had nothing but praise for the efforts expended to save the rare cat.

"We're thrilled at the teamwork among all the people and agencies that took part in rescuing and saving the panther," Brantly said. "Mr. Townsend, the veterinarians, Commission personnel, the university, the sheriff's department...all of them pitched in to help. That's why the panther is alive right now."

Other panthers have not been so fortunate. Since Big Guy's rescue, another Florida panther met its death on a highway which crisscrosses the Everglades.

On November 18, a female panther attempted to cross Alligator Alley, which traverses east to west through the Big Cypress region, and was crushed beneath the wheels of a tractor-trailer. The driver stopped but the panther had died instantly.

Less than two weeks later, the toll rose again, when on December 1, a panther which had been radio-collared by the Commission, was found dead in the Fakahatchee Strand two miles from Highway 29. Necropsy results which could explain the cause of death are still incomplete.

A more recent panther death was January 10. A female was hit on Alligator Alley, 16 miles east of Naples. Since March 1978, 15 panthers are known to have died in Florida. Collisions with traffic are the major cause.

In an effort to help preserve Florida's endangered state animal, officials at toll booths at the east end of Alligator Alley have begun handing out printed notices advising motorists of the presence of panthers. In addition, panther warning signs were posted along 50 miles of the Alley and 20 miles of SR 29.

Commission researchers have documented that panthers routinely cross these highways as they roam their territories. So far, fewer than 30 panthers have been documented as surviving in Florida.

Beginning the first week in January, Commission personnel are going back into the Big Cypress and Fakahatchee Strand areas, to attempt to radio-collar more Florida panthers. It has been through this important research that much valuable information on the state animal has been gathered. ☐

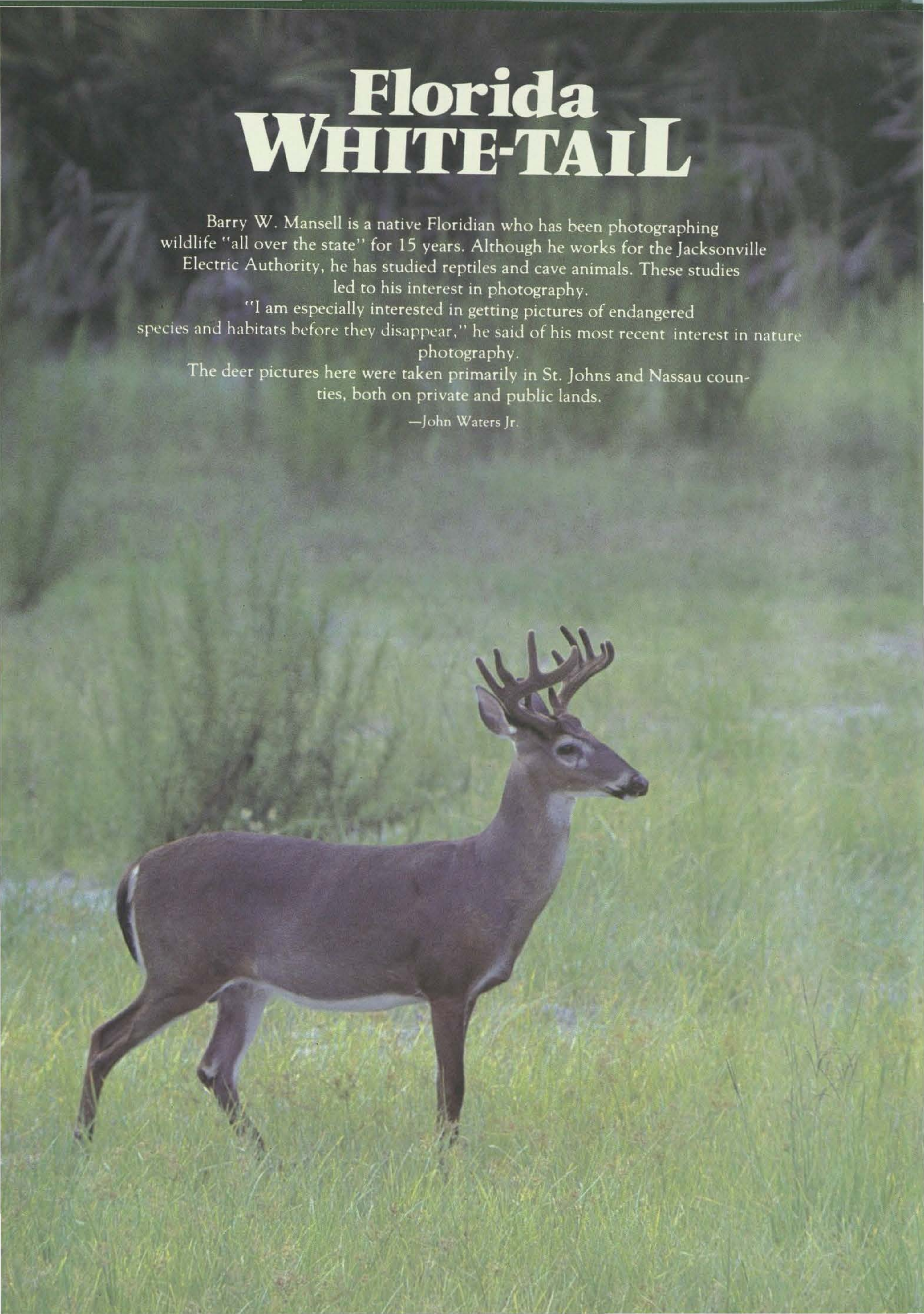
Florida WHITE-TAIL

Barry W. Mansell is a native Floridian who has been photographing wildlife "all over the state" for 15 years. Although he works for the Jacksonville Electric Authority, he has studied reptiles and cave animals. These studies led to his interest in photography.

"I am especially interested in getting pictures of endangered species and habitats before they disappear," he said of his most recent interest in nature photography.

The deer pictures here were taken primarily in St. Johns and Nassau counties, both on private and public lands.

—John Waters Jr.



·COASTAL· Scrub

Just this side of a desert

Text and Photographs By
Raymond DeLeon Powers

Imagine a place with dry, blowing sand where cacti and spiny yucca thrive among twisted, wind-tortured trees. In the shade of a stunted oak, a diamondback rattlesnake waits for the blazing sun to subside before venturing out over the hot sands. A lizard scurries across a dune and leaves tiny tracks which the wind quickly erases. A hummingbird hovers and darts above a blooming cactus.

No, it's not the west Texas desert, though there are definite similarities. This sun-baked location is along the Florida Atlantic Coast, specifically the narrow strip of dry, sandy land between the beach dunes and the coastal forest. Known as the coastal scrub zone or simply "beach scrub," it is a harsh environment shaped by constant exposure to salt spray and onshore winds.

Like the inland scrub of Florida's central ridge, the coastal scrub is characterized by thickets of low growing trees separated by open, sandy areas. Though much of the coastal scrub receives relatively high annual rainfall, the soil is porous, with little organic content to hold moisture or to nourish plant life. Rain quickly percolates through the sandy soil or evaporates, leaving the land surface dry. Because it is so dry, the scrub zone is classified as a *xeric* habitat.

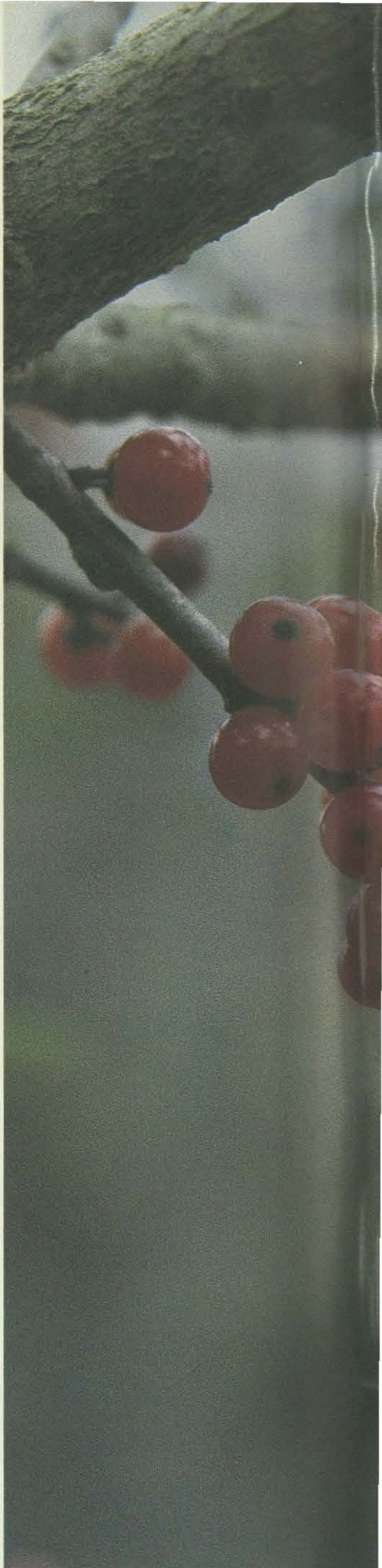
One difference between coastal scrub and inland scrub is the presence of salt spray from the ocean. This salt mist continously blows across the beach scrub and acts as a "control" by weeding out those plant species which cannot tolerate salty conditions. To survive in this difficult environment, plants must be able to withstand both dry soil and salty conditions.

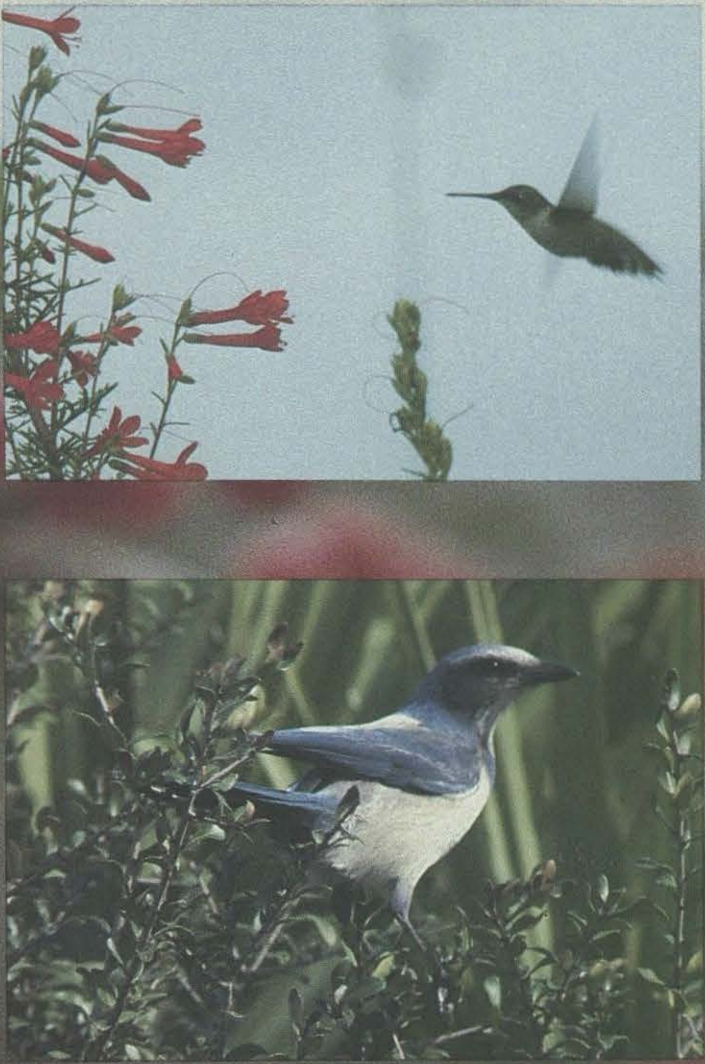
Live oak, Chapman's oak and myrtle oak are common in the coastal scrub, as are yaupon, wax myrtle and cedar. These trees may grow in brushy clumps or they may form thick mats which cover large areas. Stunted by salty breezes and little moisture, these scattered miniature forests can be extremely dense with branches woven together so tightly it is difficult to tell where one tree ends and another begins. ▷

Seemingly barren scrub actually teems with life, like the cottontail, above.

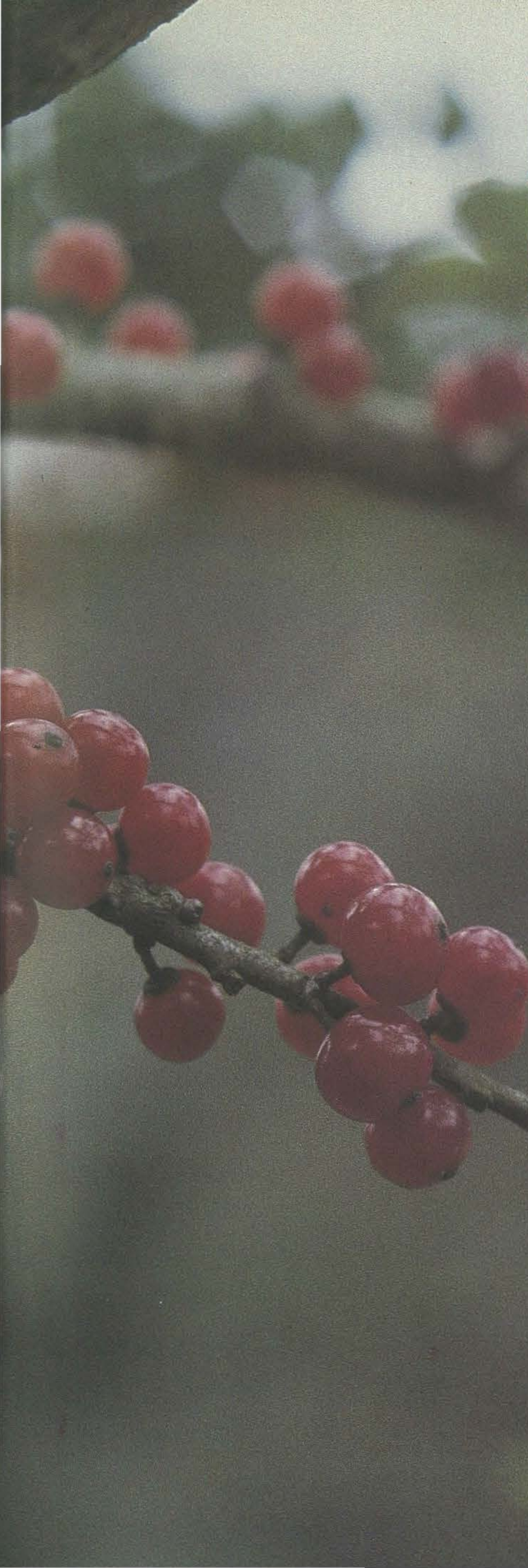
Look closely and see the gopher tortoise... even closer, there's a predatory wasp struggling with a paralyzed wolf spider...

while a diamondback rattlesnake suns near the entrance to its den.





Abundant wildflowers attract insects which in turn attract the birds, such as the diminutive hummingbird or the rare Florida scrub jay.



Though the coastal scrub may seem barren, it actually supports many species.

Because they are so dense, scrub thickets provide excellent erosion protection. The thickly matted trees shield the land surface from the full force of the wind and highest tides, while the roots help hold the sand in place. The height of a tree in the scrub can be deceiving. Often, what appears to be a short, stunted tree is actually the top of a large tree that has been buried by slowly shifting sands.

Though at first glance the scrub may seem inhospitable or even barren, it actually supports many different animal species. In the open areas, cottontail rabbits, voles and mice wear twisting passageways through the saltmeadow cordgrass. Raccoons and opossums frequent the scrub and deer tracks occasionally can be found on sandy game trails.

Being dry and warm, the scrub is perfect for several species of lizards, skinks and snakes. The gopher tortoise thrives here, sharing its burrow with the rare indigo snake and the diamondback rattler.

Because most of the mammals and many of the reptiles of the scrub are nocturnal and secretive, birds are the most obvious residents. They are attracted by both the shelter and food. A nest built in the shadowy, tangled recesses of a scrub thicket is safe from all but the most determined predators.

During spring and summer, abundant wildflower blossoms attract numerous insects on which many birds feed. In late summer and fall, birds and other wildlife feed on wild grapes, prickly pear fruits, acorns, and smilax and yaupon berries. Yaupon seems to be the favorite food of migrating songbirds. Great flocks of cedar waxwings, robins and cardinals descend on these trees to eat the shiny red berries.

One of the most fascinating Florida residents is a threatened species totally dependent on this harsh habitat type for its survival—the scrub jay. Although it is a common species in the southwestern United States and Mexico, in the eastern United States it is found only in Florida. And in Florida, it is found only in scrub habitat, both inland and along the coast. These beautiful blue and gray birds mate for life and usually remain in the area of their birth.

A scrub jay may not breed until two or three years of age and, during this time, the nonbreeding birds will assist the breeders in raising their young. This "helping" behavior significantly increases the survival rate among nestlings. (Editor's Note: Read about this behavior in "Scrub Jay," July-August 1980 issue of FLORIDA WILDLIFE.)

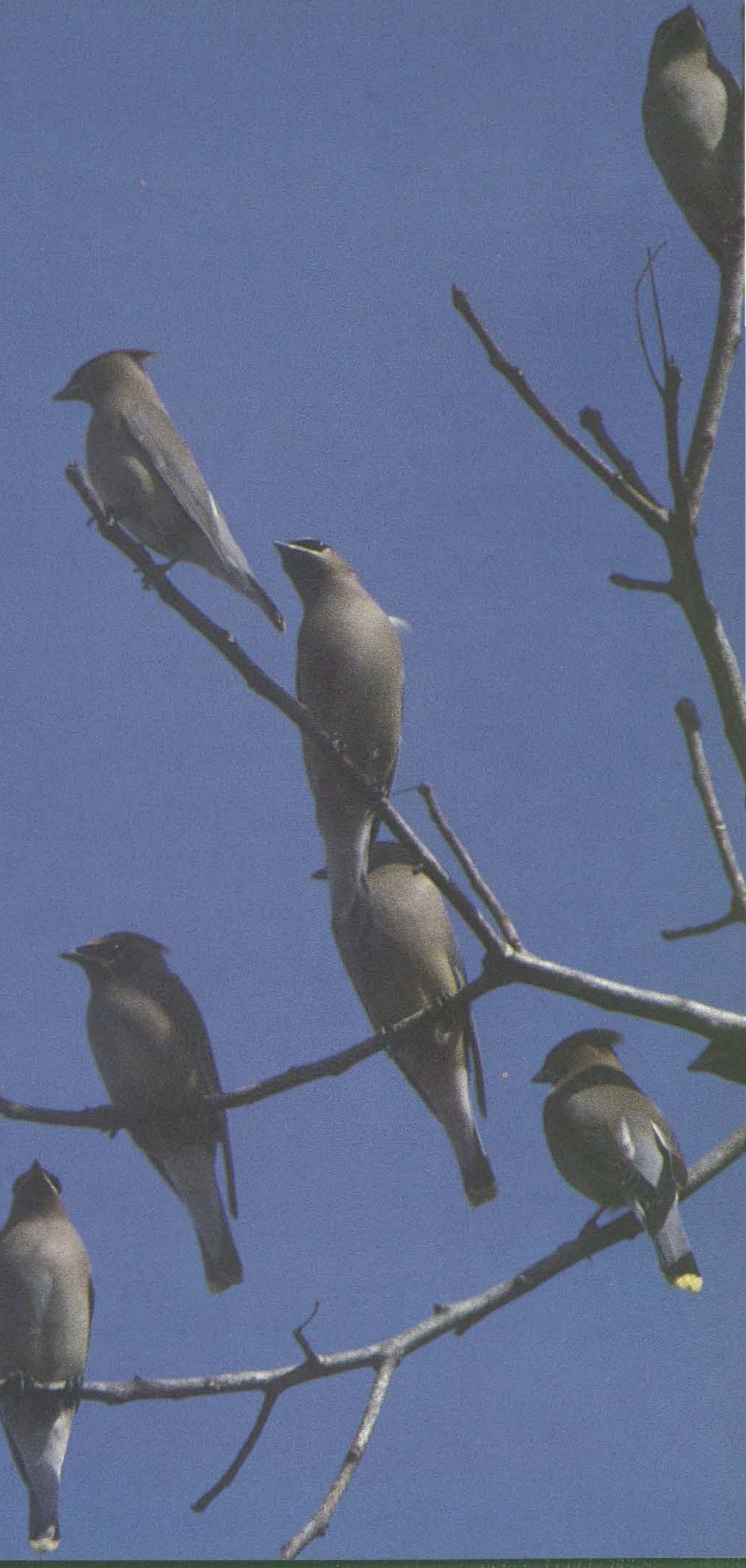
Coral bean blossoms brighten the otherwise dull scrub colors.

Unfortunately, the scrub jay's sedentary nature and specific habitat requirements, coupled with Florida's rampant coastal development, have resulted in the scrub jay being classified as a threatened species in Florida. As the scrub disappears, so does the scrub jay, along with the Florida scrub lizard and Florida mouse.

The Florida mouse is one of the only mammals found exclusively in Florida. Yet, a recent report stated, "As a result of destruction of scrub, the Florida mouse apparently no longer occurs as far south as the Miami area and is gone or greatly reduced in other places along the east coast."

Some coastal ecology experts have estimated perhaps 70 percent of Florida's original coastal scrub acreage has already been lost to development. Given the endless demand for beachfront homes, it is probable that more will be developed by the turn of the century. There are, however, several significant tracts of beach scrub which are protected within state and federal parks. Although they represent only a fraction of the coastal scrub Florida had not long ago, these parks allow Floridians and visitors to experience this unique habitat and the many creatures that depend on it for their survival. □

Great flocks of cedar waxwings descend on the scrub to feast on yaupon berries.



Heed Those Tattletale Birds

By W. Horace Carter

Splotches of leafless, half-dead hydrilla floated lazily on the surface of Lake Lochloosa and polka-dotted the calm water of this north-central Florida fishing paradise one early spring morning. A thick bank of grayish fog almost obscured the cypress-clad shoreline on this 5,705-acre panfish haven. Lochloosa has long been noted for its abundant populations of speckled perch, bluegills, warmouths and largemouth bass.

The air was warmer than the water on that first real spring morning and that created the misty cloud of fog which shrouded my bass boat, blocking out the sun's rays as they climbed their way above the horizon and pounded down on the fog's upper layer. In the time, the sun would win and the fog would submit to this superior force of nature.

Marveling at the maze of waterways which laced their way among a four-inch-thick hydrilla layer which had been uprooted by days of strong winds, and the constant pecking and pulling by "half a million" coots during two months of Florida's coldest winter in a hundred years, I was a little hesitant to guide my bass boat into the area. But a closer look showed most of the floating hydrilla patches were no larger than my living room. There was plenty of unclogged water around them.

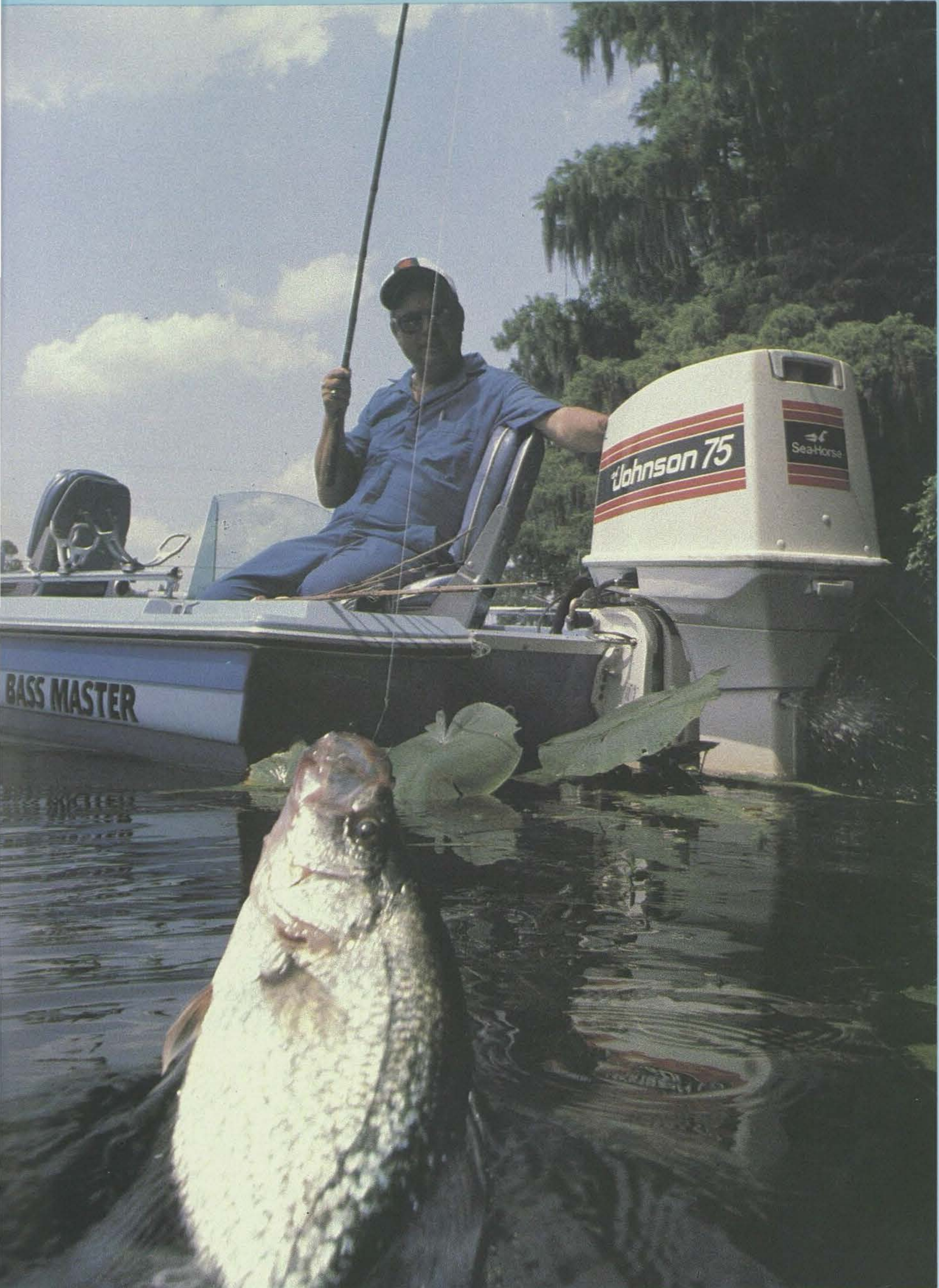
I was certain I could weave the boat, with its strong, variable-speed, weedless trolling motor, around these tangled masses without too much hanging up of the lines and hooks I had dangling from the half-dozen poles attached to holders fore and aft, port and starboard. That's the way I fish for specks.

My technique for catching speckled perch is to slowly troll 14-foot cane poles or 12-foot fiberglass rods. To each is attached a small cork which floats on the surface despite four large lead shots that try to drag it under. I move along at moderate speed with each jig hook baited with a small Missouri minnow.

I learned years ago that red or purple jigs, with some live bait added, are virtually irresistable to specks. ▷

The action on Lake Lochloosa was fast when the martins blabbered on the speckled perch.

Douglas Harmon-Photograph


BASS MASTER
Johnson 75
Sea-Horse

Fished at the right speed and depth in waters where speckled perch live, you can catch them year-round.

Fishing with jigs requires a little knowledge of just how to rig the hooks, lines and sinkers, and some know how (gained by experience) as to where the fish are likely to congregate. The more poles you have out, the greater your chances are for enticing a strike. That's why my boat always looks like it's sprouting cane poles.

Until 1980, Florida law prohibited using more than three fishing devices at one time. But the law has since been changed and unlimited poles can, for example, protrude from adjustable holders on the gunwales of a boat. The law, however, restricts anglers fishing in their home county, who do not have a freshwater fishing license, to three poles and lines.

I troll these combination live and artificial baits about a foot off the bottom of lakes as shallow as the 12- to 14-foot Lochloosa. I generally search out the deepest holes in the lake but, on that particular morning, when I saw those patches of hydrilla, an inner voice prodded me to fish around them. After all, the water was eight or more feet deep, the specks were full of roe and they were on the prowl for a place to spawn and feed.

Lochloosa's sandy bottom is attractive to specks, and this species doesn't really care whether it spews out its eggs in 10 inches or 10 feet of water. It was worth a try, so I turned my boat toward the floating stuff.

A hundred yards away, I noticed a huge flock of purple martins, those swallow-like birds that take up southern residence from early fall to late spring and then fly back north for the summer. They were hovering, diving and skimming just above the surface of the hydrilla. They were feeding a mile out from the shoreline.

Out over the hydrilla was not a usual place for purple martins, I thought. I had long known these prolific insect eaters over land in the low country, where mosquitoes are abundant. They are so proficient at gulping down pesky insects that numerous multi-family martin houses have been erected for them by homeowners and birders all over America. The sleek martins consume literally thousands of mosquitoes and gnats daily, performing their valuable insect eradication service without the hazards of chemicals.

There were, of course, no martin houses in the middle of Lochloosa that morning, although there were some on the distant shoreline. It was evident there was an abundance of flying food available out there, and the birds were having a heyday.

As I eased the boat close to where they were feeding, a cork disappeared and a pole dipped and danced. I picked it up and gently set the hook.

A 14-inch, pound-and-a-quarter speck soon went into the live box. For the next hour, I worked like a one-armed paper hanger with the seven-year itch, jumping from bow to stern, tending strikes on one hook or another. It was great! I soon had the legal limit of 50.

I'll never forget that day. The high humidity and dense fog had forced billions of gnats and mosquitoes to take refuge on the floating hydrilla because they couldn't make landfall with their wings so heavy from the moisture. They competed for landing space, some toppling into the water. The activity of the flying insects attracted the martins and the birds had a picnic, but those insects that fluttered helplessly on the water attracted millions of hungry minnows. When the minnows flitted about the hydrilla patches feeding, the larger predators were not far behind.

Schooling specks were gorging themselves with gambusia minnows. Darting bluegills were sucking in the mosquitoes not caught in midair by the martins and even some largemouth bass, bowfins and chain pickerel had entered the fray.

It was a bonanza not only for the fish but also the anglers. Before midmorning, the fog had lifted. Dozens of other boats and anglers were milling around and bent poles and light rods, along with the noise of flouncing fish on the water, were proof enough that success was being enjoyed by all.

Had the martins not flocked to where the insects had gathered, few anglers that morning would have taken the time to weave in and out of the hydrilla patches. Ordinarily, fishing in the weeds results in losing lures, minnows and time when hydrilla fouls around the hooks and lines. Most anglers shun these areas, but it proved profitable that day.

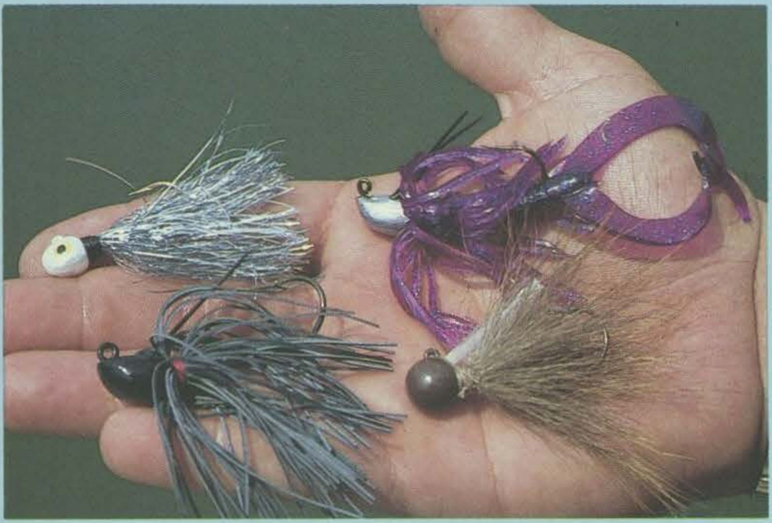
Birds have long been tattletales for freshwater striped bass anglers as well as for saltwater anglers fishing for blues, mackerel and other vicious predators of forage fish. Some striper fishermen who fish large lakes or open water never go without taking binoculars with them in their high-powered fast boats. They cruise out into an area where stripers often school, stop, then begin looking for diving gulls.

Knowing the enthusiasm of striper fishermen for locating flocks of diving gulls prompted the Drose brothers at Santee-Cooper, S.C.—Don, Frank and Joe—to carry a box of soda crackers with them each time they go fishing there. Santee-Cooper is a 171,000-acre reservoir with dead forests on its bottom. Everywhere are submerged logs and stumps, threats to every careless boater.

"It's not uncommon for a boat to hit one of these logs and split its bottom wide open," Joe Drose says. "When that happens in this big water, you have to get help pretty quickly, particularly when it's cold and you find your boat half under and you're hanging on for dear life. That's why I carry the crackers.

"You can crumble a handful of these on the surface and the gulls will come in droves from everywhere. There is likely to be someone in the distance who sees the gulls diving, then rushes in to what they think is a school of fish. That brings help."

No one that I know of is carrying any crackers aboard Lochloosa's speck fishing boats as insurance in case of accidental capsizing. But there are more and more people observing the tattletale activities of the martins and other birds there. They know these wily creatues can spot a food supply even in the fog and, where one of nature's creatures feeds, others are likely to gather. □



W. Horace Carter-Photograph

Troll these jigs near cover to attract specks.

W. Horace Carter-Photograph

Martin houses line the shore of Lake Lochloosa

Jim Farrior-Photograph

Try Angling the Triangle

By Eric Palmer

When bass fishermen think of Florida, many of them dream of the St. Johns River, Lake Okeechobee or other legendary bodies of water that have been publicized for years. They often overlook three lakes less than 30 minutes apart in north-central Florida, which contain some of the best bass fishing available in the state.

Orange, Lochloosa and Newnans lakes have accounted for many a dream come true for anglers who have tapped their resources. Local fishermen long have enjoyed the availability of fish in these lakes. All three lakes have excellent nursery areas where small fish can mature so the bass populations remain fairly constant year after year.

Fall and spring are typically the best times of the year to catch fish, with most "wall hangers" caught in March and April, but bass weighing more than 10 pounds are caught throughout the year. After fishing these lakes for years, anglers have developed a smorgasbord of different techniques to catch bass.

The lakes not only offer excellent fishing, but also an abundance of wildlife. Alligators are a common sight, as are ospreys soaring in the sky. Sometimes bald eagles are spotted.

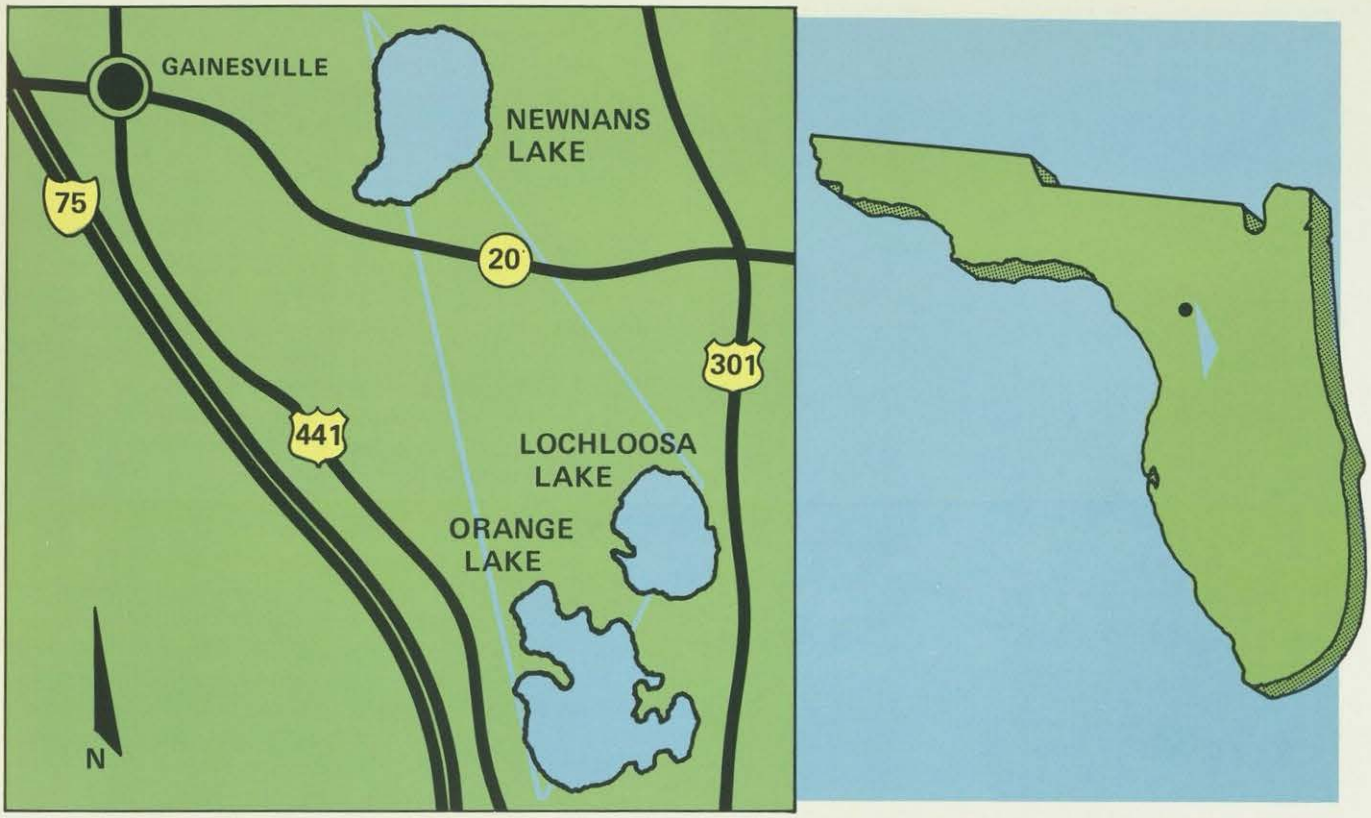
ORANGE LAKE

This 12,706-acre lake, southeast of Gainesville in Alachua and Marion counties, is a bass angler's paradise. It has lily pads, hydrilla and maidencane available for fishing. Probably more lunker bass are caught in this lake than any other north-central Florida lake. Several launching areas surround Orange Lake, including those at Cross Creek and near McIntosh, Citra and the village of Orange Lake.

Orange Lake's many excellent bass hideouts present a difficult question for most first-time anglers here. Where are the best spots to fish?

Concentrated fishing in two areas—lily pads and maidencane—will produce the best results. These are the habitats bass have most recently been found to prefer. When fishing both these areas, use heavy line (about 20-pound test) because, when hooked, bass use the weeds to their fullest advantage.

In a recent study of Orange Lake, Game and Fresh Water Fish Commission fisheries biologist Gary Byerley found 44 pounds of bass per acre of maidencane and 29 pounds of bass per acre of lily pads. Herbicide spraying of hydrilla by the Department of Natural Resources (DNR) apparently caused many bass to migrate into the maidencane, where bait fish were abundant. When the hydrilla was dying out, the number of bass in the maidencane increased.



Orange, Lochloosa and Newnans lakes offer big bass and plentiful panfish.

In years past, hydrilla had virtually taken over Orange Lake, making fishing with anything other than weedless lures nearly impossible. The hydrilla has now been controlled to the point that fishing is much easier. In the winter months, hydrilla usually dies back, enabling easy access to Orange Lake's open water.

Before traveling great distances to fish Orange Lake, you might want to ask DNR if any spraying will be taking place while you plan to fish. Bass are noticeably lock-jawed when spraying is going on.

Maidencane fishing in this lake requires the mastery of two lures, silver and black 5-inch Rapalas and tail-action plastic worms. The Rapala should be tossed just to the edge of the maidencane and held motionless until the ripples around it are about six inches away from the lure. A slight twitch will usually cause any bass in the area to attack wildly. If this twitch does not produce, reel in the lure slowly and repeat the procedure.

The most popular artificial worm on Orange Lake is the shad-colored one, but the black shad is also popular.

Lily pad fishing has been one of the most productive means of fishing this lake for years. The abundance of lily pads throughout the lake is overwhelming, and almost all contain fish. Moccasin-colored plastic worms fished slowly along the bottom are very productive.

Guides on this lake also recommend large native shiners to produce fish for their clients. These shiners can be caught at the edge of weed beds or purchased at any of the fish camps around the lake.

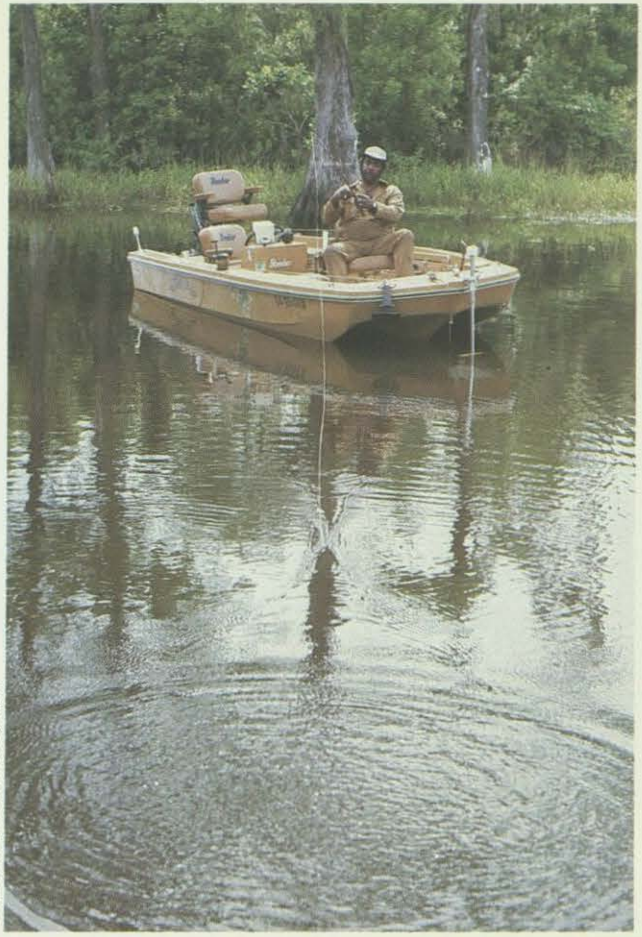
Maps which show many hot spots on Orange Lake may be purchased from numerous places in the area. Two excellent locations are the lily pad patches around Bird Island and the maidencane around Grassy Point.

LAKE LOCHLOOSA

This 5,705-acre Alachua County lake southeast of Gainesville has public access at Cross Creek, the village of Lochloosa and the "Old Caraway Landing" on the north end, near where Lochloosa Creek empties into the lake.

Orange and Lochloosa have been called "sister lakes," but if the two are compared, it is hard to believe the differences. The shoreline of Lochloosa is mostly covered with maidencane instead of lily pads. Large hydrilla beds can be found outside the maidencane and are favorite feeding grounds for bass. Byerley found there were 37 pounds of bass per acre in the lake's hyrilla beds.

Flipping plastic worms around these beds any time of the day will usually get results, but be prepared to pull in just as many pounds of weeds as bass when a fish is caught here. ▷



William Greer-Photograph

These hydrilla beds are productive year-round because they provide cover in the summer and warmth in the winter. Add a constant food supply and it's easy to understand why bass hang around them.

Byerley found Lochloosa's lily pad areas had 20 pounds of bass per acre. Plastic worms also seem to be the favorite fishing lures for bass in the pads.

Another productive lure that is rarely fished around the pads is the three-inch Johnson Silver Minnow with a Pork Frog trailer. When tossed close to the pads and brought out, this lure is deadly. Many lunkers have been boated using this combination.

During fall and winter, Rat-L-Traps fished ouside the hydrilla beds will catch fish. Patience is a must when trying this method because many weeds will be snagged on the retrieve.

Breaks in the shoreline maidencane, especially those with cypress trees, provide another excellent place where bass wait. Wild native shiners and the Silver Shiner Devil's Horse are favored by bass in these areas.

Another lure that has produced in these locations is the Rat-L-Stick. These bass seem to like lures that make a little noise, but not as much as a buzz bait would produce.

NEWNANS LAKE

This 7,427-acre Alachua County lake just east of Gainesville is accessible to the public off State Roads 26 and 20 on its western and southern shores and County Road 234 near its eastern shore. Newnans Lake had a phenomenal 67 pounds of bass per shoreline acre, Byerley's study found. Almost the entire lake is surrounded by flooded cypress trees that provide thousands of havens for bass.

Most fish in this lake are caught from the shoreline areas, usually those which have coontail growing in the water outside the tree line. The ability to cast under and between cypress trees greatly increases the odds of going home with fish.

Unknown to many local fishermen is the fact that crawfish are one of the most loved bass foods in Newnans Lake because of their availability around trees. This was discovered through researchers' inspections of stomach contents of fish and this knowledge has increased the number of fish caught by anglers who know about this feeding habit.

The relatively new rubber crawdad lures in "motor oil" and brown/orange colors are especially effective. Rigged Texas-style, with a ⅛-ounce bullet weight, these artificial crawdads have a life-like action when slowly jerked across the bottom. This drives the bass among the cypress trees crazy.

During the heat of the day, fishing can be best on the north end of Newnans Lake in the large patch of lily pads which provide shade for the bass. Flipping worms into the holes between these pads has proven to be very successful.

In the summer, when the water temperature of the lake rises considerably, fish the creek mouths on the south end with Rat-L-Traps. After a rain, the water temperature may drop as much as 10 degrees there. This temperature drop, combined with more food in the water, is an instant bass attractor.

In the fall, a favorite lure is the White Lunker. When tossed under the overhanging trees, this light-colored lure contrasts with the dark, tannin-stained water.

An added pleasure of Newnans Lake is its year-round abundance of specks. Winter months are the most popular times to fish for them and a nice mess of fish can be caught by trolling minnows in the open water in the middle of the lake.

When fishing any of these three lakes, talk to local tackle shop and fish camp operators. They can give you many helpful tips. For information about lodging and places to visit in the area, write the Gainesville Area Chamber of Commerce Inc., 300 East University Avenue, Gainesville, FL 32601. ☐

William Greer-Photograph

FLORIDA WILDLIFE'S *Fishing* category photo contest winners

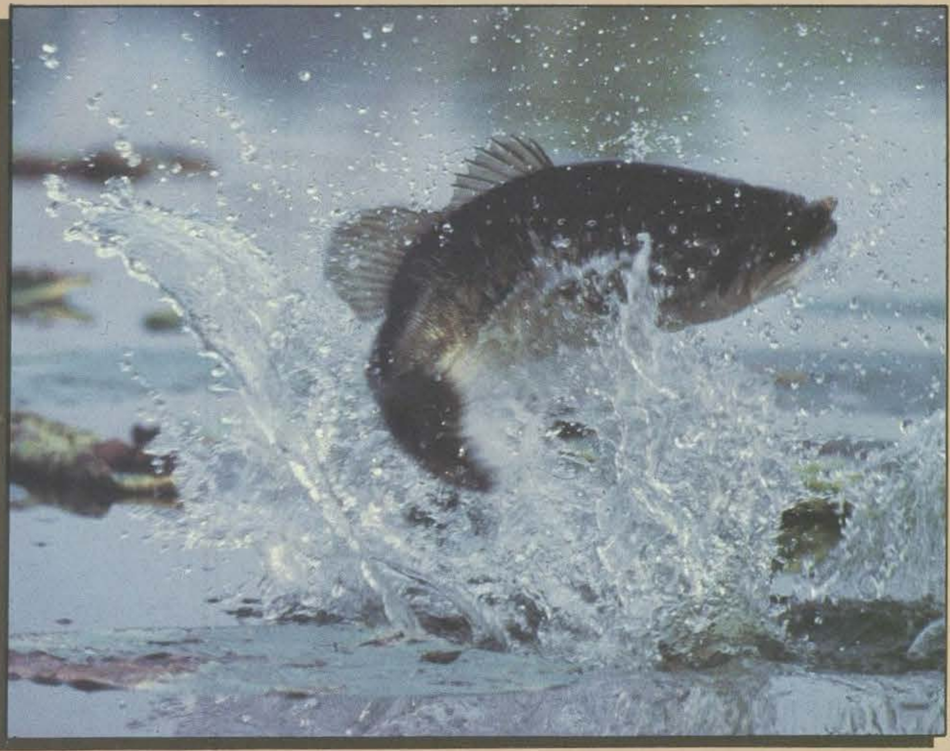
The photographs on this page show the third category winners in FLORIDA WILDLIFE's 1984 photography contest. This group had the least number of entries. I imagine fishing photography must have been our most challenging and difficult category.

Photographing freshwater fish in their habitat requires a superb practical knowledge and can require costly or specialized equipment. Photographing anglers can tempt one to put the camera down and pick up the rod and reel, too!

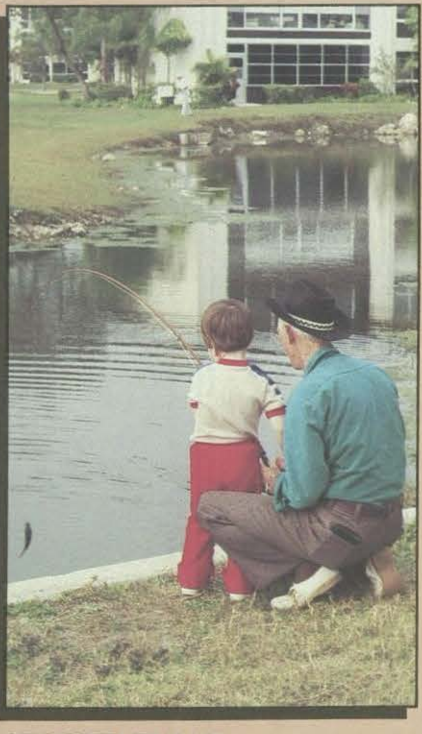
In sharing my thoughts on our nongame (first category) photography entries, I said ingenuity was required to come away with notable pictures. Looking at these fishing photograph entries, I have no idea how Brian Proctor "caught" his first-place bass. Was it through tireless patience, waiting at the ready for that right moment? Or was it through some clever device of his own creation? He not only was able to bring home that battling bass but he also captured the essence of both fishing and photography.

In a more traditional vein, Mrs. Roger W. Loveless captured the timeless ritual of a grandfather passing down to his grandson a love for fishing and the earliest lessons in appreciating the outdoor experience.

FLORIDA WILDLIFE's 1984 photography contest had more than 400 entries in all three categories—a chore for the judges. The staff hopes the contest was a delight for you. Endings bring new beginnings, however, so on the following page you will find our invitation to enter FLORIDA WILDLIFE's 1985 photography contest. Those of you who entered the last one, but did not place, will have another chance, so read the announcement and get going. I challenge you to look at Florida's wildlife, view it from new perspectives and send us the results. —John Roberge



FIRST PLACE, Brian Proctor, Tallahassee

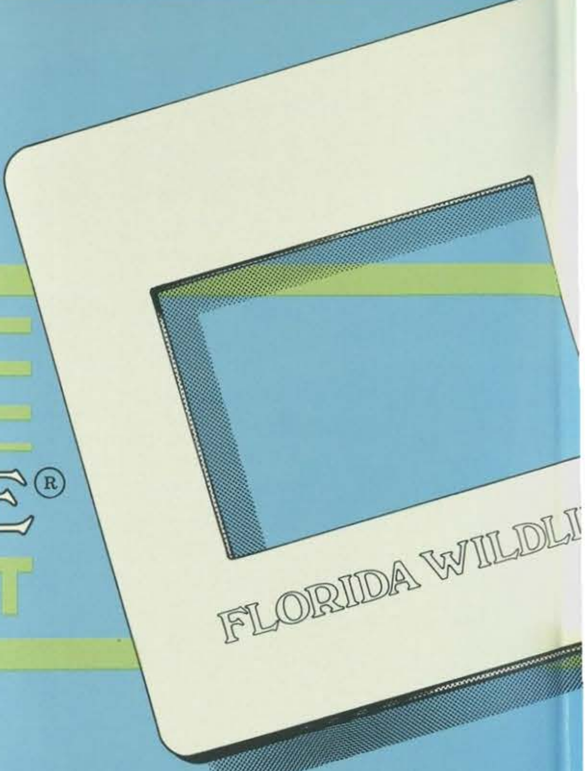


SECOND PLACE,
Mrs. Roger W. Loveless,
Worthington, Ohio

FILL THIS SPACE

FLORIDA WILDLIFE®

1985 PHOTO CONTEST



FLORIDA WILDLIFE's 1984 photography contest was such a success that we decided to do it again. So, read the rules, load your camera with fresh film and get going! You have until June 28 to get your entries to us.

To make our second annual contest even more exciting, we have revised the categories to include a wider variety of living things found in Florida. The four categories for the 1985 photography contest are:

Category A—Birds
Category B—Mammals
Category C—Fish, amphibians, invertebrates and reptiles
Category D—Hunting and fishing in Florida

With four major subject areas from which to choose, there should be plenty of opportunity for photographers to show us their best. Thanks to the wonderful variety of wild things in Florida, no one with a camera needs to be left out of the fun.

Winning entries may be published in the magazine, if so recommended by the judges. If they are, the photographers will be paid at our usual rates, depending on space allotted to their work. Last year's winners were paid a total of $545!

If you take time to enter, please be very sure you read and follow all the rules listed here. Of particular note, only 35mm color slides or 2¼"x2¼" color transparencies are eligible and, this year, no humans in the photographs please, except for Category D. Please do not send negatives or prints. And, don't forget to include a stamped self-addressed envelope if you want your photographs returned after the contest is over.

If you should move during the contest period, please be sure to advise us of your new address. Judging will take place after July 1 and nonwinning entries will be returned soon after.

Winning photographs will be announced in the September-October 1985 and November-December 1985 issues of FLORIDA WILDLIFE. Criteria for judging will include image sharpness, color, composition, difficulty of obtaining the picture, artistic merits, imagination and appropriateness to the theme and purpose of FLORIDA WILDLIFE (see our statement of purpose on Page 1).

THE RULES

1. Only original 35mm color slides or 2¼"x2¼" color transparencies (positives) are eligible. Prints, negatives and duplicates (copies) are not eligible.

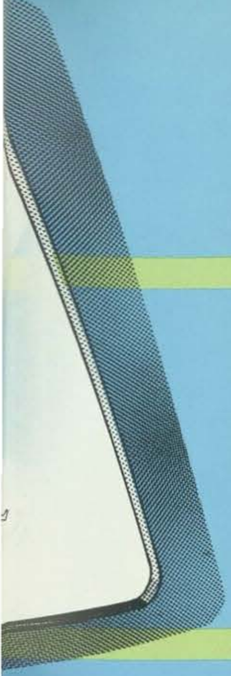
2. Each single entry or group of entries in a category must be accompanied by a completed, legible Official Entry Form. Photocopies of the entry form will be accepted. All Official Entry Forms must be signed. Photocopies of signatures will not be accepted.

3. All entries must be labeled with the name of the photographer plus his or her Social Security number.

4. Up to five individual photographs may be entered in each of the four categories; however, each individual entry can be submitted to only one category. Entry forms for each category must be labeled "A, B, C or D" to show which of the categories listed here are being entered:

Category A—Birds
Category B—Mammals
Category C—Fish, amphibians, invertebrates and reptiles
Category D—Hunting and fishing in Florida

Only Category D may show humans in the picture.



5. All entries must be accompanied by a self-addressed, stamped envelope for return. Multiple entries sent at one time need only one return envelope. Do not send money for return—attach sufficient postage stamps to the envelope, please.

6. Each entry must be attached to a 3″x5″ card (such as a standard index card) showing the photographer's name, mailing address and Social Security number. Number the card to correspond with the photograph number on your Official Entry Form. Only photographs taken in Florida of wildlife species (within the four categories) which live or migrate here will be eligible, except Category D may also show people.

7. Only photographs which have never been published in a magazine will be eligible.

8. Entrants are responsible for notifying FLORIDA WILDLIFE of any change of address during the time of the contest.

9. Entries must be mailed to FLORIDA WILDLIFE PHOTO CONTEST, 620 South Meridian Street, Tallahassee, FL 32301. Entries must be received no later than June 28, 1985.

10. Decisions of the judges will be final.

OFFICIAL ENTRY FORM

CATEGORY: ____

Please Type or Print Plainly

Photographer (Entrant): ____

Mailing Address: ____

City: ____ **State:** ____ **Zip:** ____

Telephone: ____ **Number of Entries:** ____

Photograph No. 1 was taken in ____ **County**
and is ____

Photograph No. 2 was taken in ____ **County**
and is ____

Photograph No. 3 was taken in ____ **County**
and is ____

Photograph No. 4 was taken in ____ **County**
and is ____

Photograph No. 5 was taken in ____ **County**
and is ____

I certify that I am the photographer and owner of these entries (photographs) and that all entries were taken in Florida, and I hereby give the Florida Game and Fresh Water Fish Commission my permission to publish my entries in *Florida Wildlife* in accordance with the rules published in the January-February 1985 issue.

Signed: ____ **(Entrant)**

Social Security Number: ____

MODEL RELEASE

I, ____ (model's name),

for good and valuable consideration, do hereby give ____

____(photographer's name)

and *Florida Wildlife*, an information and educational periodical magazine published by the Florida Game and Fresh Water Fish Commission, an irrevocable right to use my name (and any fictional name) and photograph for publication in *Florida Wildlife*. I have read this release and fully understand its contents.

I affirm that I am 18 years of age or older.

Witness Signature: ____ Signed: ____

Address: ____ Address: ____

____ ____

Date: ____

Guardian's Consent for Minor Models

I am the parent or legal guardian of the above-named minor and hereby approve the foregoing Model Release and consent to the use of said minor's name and photograph as aforesaid.

I affirm that I have the legal right to issue such consent.

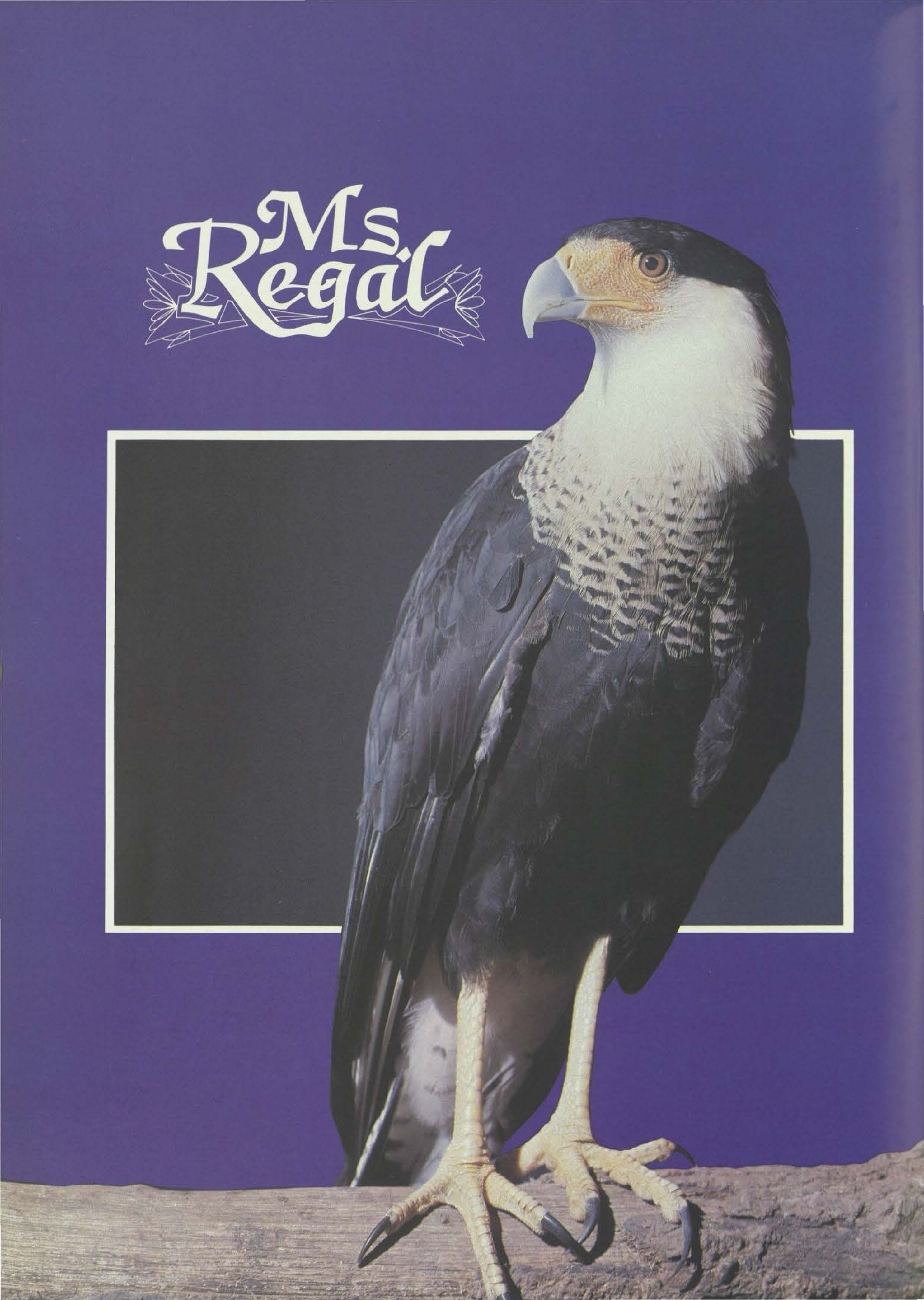
Witness Signature: ____ Signed: ____

Address: ____ Address: ____

____ ____

Date: ____

Ms Regal



A Portrait Becomes a Poster

By John Waters Jr.

Doris Mager had just the bird we wanted for our first nongame wildlife poster, I'd been told. So, when Dr. Allan Egbert said she would be "delighted" to have her favorite bird's picture taken for the benefit of Florida's nongame wildlife, the appointment was made.

When I arrived at her edge-of-town country home near Apopka, I immediately sensed something special about her place. It was an isolated niche of native Florida wooded habitat, surrounded by modern, typically American suburbia. Before arriving at her private sanctuary of mature oaks, pines, native shrubs, beneficial ornamentals, ferns, and of course her injured birds of prey, I had driven through a neighborhood that had neatly clipped centipede lawns, a few cleared fields and some yet uncleared natural areas.

It was refreshing to arrive at the end of her winding driveway after a five-hour drive from Tallahassee. Shortly after I parked, Mager showed me the magnificent bird I was hoping to get a good picture of—Ms. Regal—a mature crested caracara in perfect plumage.

The caracara was sunning on a roomy perch in the backyard, not far from a wide-eyed great horned owl, several bald eagles, two hawks and the largest of her birds, a golden eagle. Mager told me, "Go ahead and set up your equipment and just call me when you're ready," as she went to tend another project.

The studio in which Ms. Regal's portrait was to be made was a cage about six feet wide and eight feet long. Not much room for camera, tripod, lights, stands, reflectors, background, props, Ms. Regal and me. The cage hadn't been used for some time. Most of these birds are kept on individual outside perches where they can move about and benefit from having both well-lighted areas in which to sun themselves and shade when they need it.

Only a ragged, one-winged old bald eagle was caged at this backyard bird hospital. The eagle was confined for his own protection. The other birds were healthy enough to escape from the occasional stray cat or raccoon that might enter the sanctuary in search of easy prey.

When all the contraptions and gizzmos for making the photograph were set up in the cage, Mager slipped the jesses loose from Ms. Regal's legs and sat her on a perch which was in just the right spot to take a close up. As soon as the beautiful bird was loose, it half leaped and half flew to the opposite end of the cage. Repeated efforts to get Ms. Regal to stay on the perch, made by Mager as I watched from outside the cage, were unsuccessful.

After repeated attempts, she suggested, "John, why don't you come inside and see if she'll accept you?"

I entered the cage and followed instructions on how to make friends with my subject. "She just loves to be scratched behind her head. Just move your fingers like this," she explained, demonstrating the secret to acceptance.

I copied the motion, a scratching of the air just in front of the bird. Ms. Regal walked sideways along the perch, then bowed low to let me reach behind her head to scratch the feathers and skin there.

"I think I'll just leave you two," my hostess said as she left the cage. Ms. Regal showed no signs of fear. For whatever reason, the bird was acting tame and being very cooperative. There still was, however, the small problem of coaxing her to sit on the perch set up in front of the camera.

Repeated efforts to move the bird anywhere toward the right perch failed. The bird was intent on staying right where she was.

The solution was to move the background first, which required one hand scratching Ms. Regal and the other stretching to the top of the cage to hang the blue linen cloth so there weren't any wrinkles. Next, the camera was rotated around to face the perch the bird had chosen. After this maneuver, the strobe light had to be moved, along with its reflector, and the stand.

I continued to scratch Ms. Regal while slowly repositioning all the gear. The bird followed my every move as the small confined world we found ourselves sharing was completely rearranged. Everything went well until I tried to coax her onto the piece of cypress wood I had brought along for her to sit on.

It was tied down only 18 inches from where she had been sitting while I moved everything. Only a few inches now and the first frames could be taken. I talked to her and offered to scratch her some more, but the bird would not move to the cypress. That idea had to be abandoned and "her" perch used instead.

When I turned away to climb a short step ladder so I could operate the camera, Ms. Regal began walking back and forth along the perch and turned her tail to the lens. More scratching, then, at last, the pictures.

Our intended half-hour sitting took five hours, and I only got pecked once by Ms. Regal's sharp blue beak. "Oh," Mager exclaimed when I told her about the bird's quick snap on the edge of my hand, "did she cut you? Do you need a bandage?"

"No," I explained. "It was just a gentle nip."

"That means she likes you," Mager explained with a chuckle. "If she likes you, she'll bite you. Of course, if she doesn't like you. she'll also bite—but she'll take a hunk out of your flesh if she gets a good hold."

I left that afternoon with the pictures and a new friend. After having encountered Ms. Regal, I brought home a special feeling of having expanded my appreciation for one of our most splendid nongame wildlife species. I had been pecked, and still had all of my hand. □

Audubon's CARACARA

The crested caracara, also known as the common caracara or Mexican eagle, is one of Florida's most distinctive birds of prey. Together with the sandhill crane and burrowing owl, it is a characteristic inhabitant of the central Florida prairies and pasturelands, where it is often seen perched conspicuously on a fence post or utility pole along the roadside.

The crested caracara is one of only 10 living species of caracaras. The caracaras form an aberrant subgroup of the falcon family (*Falconidae*). The more typical members of this family include the magnificent peregrine falcon and the brightly-colored, diminutive American kestrel. Caracaras as a group are characteristic of the neotropical region (Central America and South America). The crested caracara is the only caracara species to range in the United States.

Another interesting feature of its geographic distribution is the existence of isolated populations in peninsular Florida and Cuba which are far removed from the main species' range which extends from southern Texas and Arizona southward to the tip of South America, including Tierra del Fuego and the Falkland Islands. The crested caracaras occurring in Cuba, Florida and from the southwestern United States to Panama have been described as a separate subspecies, *Polyborus plancus auduboni*, often called "Audubon's caracara." The specimen upon which the description of this subspecies was based was collected by Audubon in 1831 near St. Augustine.

The established range of the caracara in Florida is the open, grassland-dominated country in the south-central region of the peninsula from about the level of Orlando to a short distance south of Lake Okeechobee. The region of greatest abundance is a five-county area (Glades, DeSoto, Highlands, Okeechobee, Osceola) north and west of Lake Okeechobee.

The crested caracara is easily recognized by its

By James N. Layne

large size, relatively long neck and legs, unusual color pattern and bare facial area. It has a length of about 22 inches, a wingspan of 48 inches and a weight of two pounds. Females tend to be slightly larger than males; otherwise there are no differences in the appearance of the sexes. The common name "crested caracara" is derived from the long feathers on the back of the head which form a crest. Adults have a bold black-and-white pattern. The top of the head, lower back, wings and abdomen are black and the sides of the head, throat, breast and tail are white. The upper back and breast are horizontally barred and the tail has a series of dark crossbars with a wider band at the tip. There is a prominent area of yellow or orangish-colored bare skin between the eyes and the base of the beak. The massive beak is bluish in color, and the legs and feet are bright yellow or orange-yellow.

A distinctive feature of the caracara in flight is the prominent white patch on the outer part of the wing at the base of the primary feathers. Juveniles are brownish where adults are black and buffy; or tawny where the adults are white. Juveniles also have vertical streaks instead of bars on the upper back and breast. The juvenile's facial skin is gray or pinkish, and the legs and feet are gray. Full adult plumage is acquired at about four years of age, with individuals between the juvenile and adult stages showing various combinations of juvenile and adult plumage characteristics, depending upon their age.

The caracara is a powerful flier capable of speeds up to about 40 miles per hour. It spends much time perched on telephone poles, snags, fence posts or other good vantage points and is more at home on the ground than most other hawks and falcons. With its long legs and relatively flat claws, it is well-adapted for walking and running.

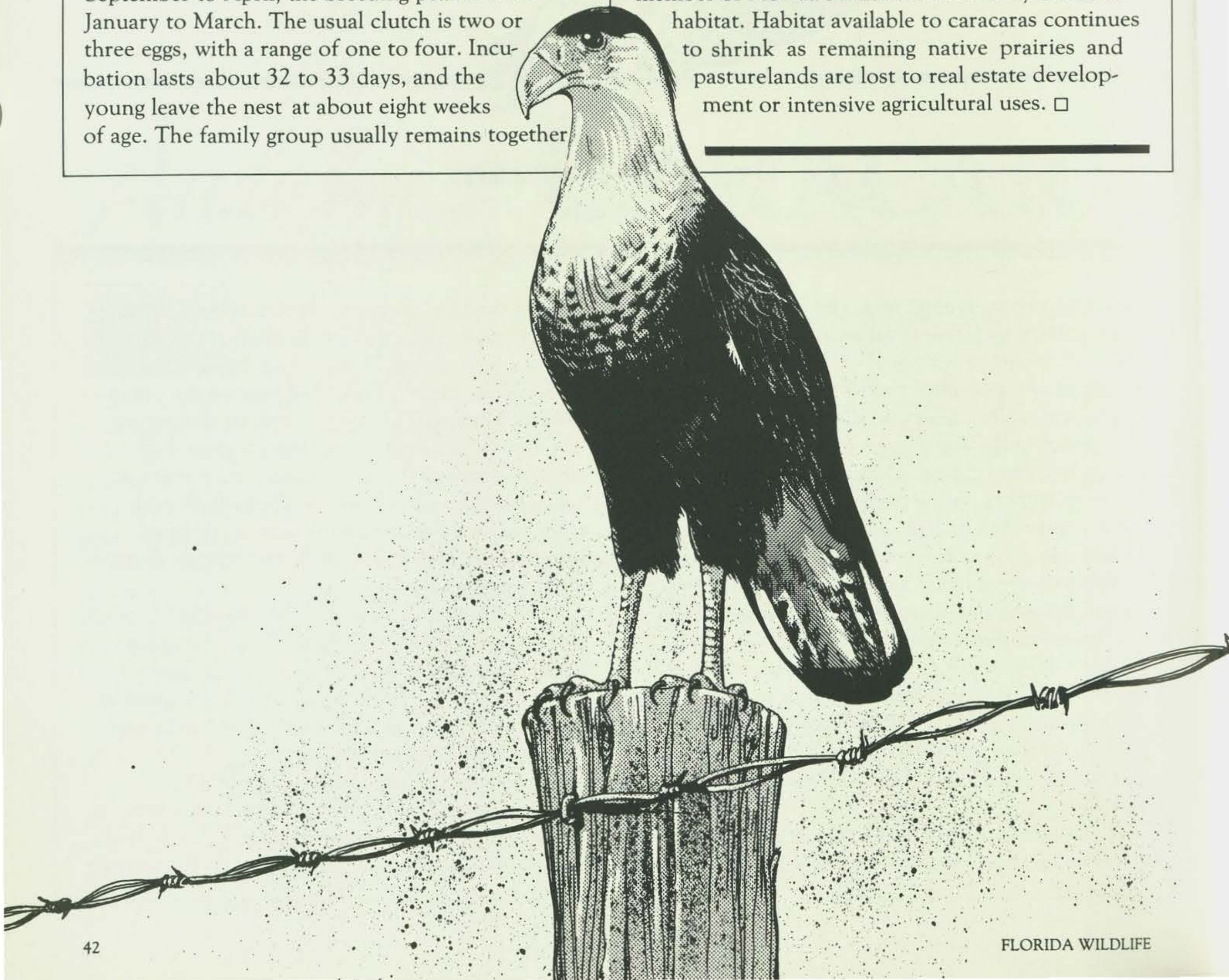
"Opportunistic" describes its feeding habits. Its diet includes a wide variety of live prey as well as carrion. It hunts on the ground and on the wing. ▷

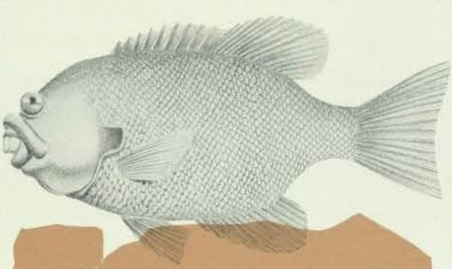
Insects, fish, frogs, reptiles, birds and small mammals are taken. A pair of caracaras will sometimes join forces to subdue a larger animal such as a rabbit or cattle egret. Road-killed animals are an important food source for many caracaras, and in some cases, the birds regularly patrol a stretch of highway looking for road-kills. When caracaras and vultures gather at a carcass to feed, the caracaras easily dominate the vultures despite their smaller size. They have even been observed driving bald eagles away from a road-killed animal.

Adult caracaras maintain large territories, usually with their mates. Pair bonds are strong, apparently persisting until one of the mates dies, and the pair remains close throughout the year. As the breeding season approaches, the pair begins to spend more time at the nest site. During courtship, the male brings food to the female. Both sexes participate in building the nest, a bulky structure of slender vines and sticks usually located in a cabbage palm. Although eggs have been found from September to April, the breeding peak is from January to March. The usual clutch is two or three eggs, with a range of one to four. Incubation lasts about 32 to 33 days, and the young leave the nest at about eight weeks of age. The family group usually remains together for two or three months after the young fledge.

Although Florida crested caracaras still occur in the same region as in the early 1930s, when its distribution in the state was first accurately mapped, the population has undergone a considerable decline since. A survey in the late 1960s found fewer than 100 individuals in less than 60 localities. However, censuses and reports of sightings from 1973 through 1978 indicated the existence of about 150 active territories, representing 300 adults in 17 counties. In addition, at least 100, and probably more, immature birds were estimated to be present in any given year, giving a minimum estimate of total population of 400 to 500 individuals.

Although fully protected by both state and federal laws, caracaras are still occasionally shot or trapped. The increase in the number of roads and volume of traffic in its territories is probably taking an increasingly heavier toll on the population. However, the major threat to this interesting member of Florida's wildlife community is loss of habitat. Habitat available to caracaras continues to shrink as remaining native prairies and pasturelands are lost to real estate development or intensive agricultural uses. □





The Miccosukee Mudsucker

Tall tale for the campfire

By Sam Westbrook

The Lake Miccosukee mudsucker is extinct and has been since the turn of the century. Its existence was unknown until late 1967. The discovery of this ichthyological oddity and the relationship between it and the early Miccosukee Indian pottery is one of the most amazing detective stories in modern archaeologial history. This is the first published account of the sequence of events that led to that discovery.

Since March 1967, archaeologists have been investigating an area of land on the northeast shore of Lake Miccosukee, 30 minutes away from Tallahassee. Here they uncovered an encampment which dates back to approximately 500 A.D. This site is very much like others of the southeastern United States that were developed during this period. The basic environmental structures, temple construction and many of the hunting implements can be found in at least 40 other regional sites.

However, there is one detectable difference which sets this site apart from the others. That difference can be found in the pottery. The quality and composition of the clay, as well as the use of certain design motifs, differ markedly from the pottery found at other sites. It is this difference that led to the discovery of the Lake Miccosukee mudsucker.

The fish, technically known as *Lepomis buckatoophus*, is closely related to that group of fishes which includes the bluegill, stumpknocker and goggle-eye. It has the same general anatomical structure and body shape. The most apparent difference is found in the head structure and, in particular, the formation of the teeth. It is the function of those teeth which provided clues to the relationship between the fish and the pottery found at the encampment site.

Fossil remains of this fish reveal four human-like teeth, separated by a space of approximately 1/32 of an inch. These spaces served as a filter during the feeding process.

During their feeding cycle, it is believed, the fish swam along the bottom and inhaled food with mouths open and teeth closed. Everything within several inches was sucked toward its mouth, including large chunks of the bottom. The mudsucker's closed teeth acted as a filter by preventing these large chunks from entering the mouth. The small spaces between the teeth admitted only plankton, minute water creatures and fine silt. All foodstuff was taken farther into the digestive system while the fine silt was collected in the mouth. (You have probably guessed by now that the name of the fish was derived from its feeding habits—sucking the muddy bottom for food.)

During its estimated 24-hour feeding cycle, the mudsucker collected the silt or mud in its mouth until it could no longer feed. At this stage, it was necessary for the fish to spit out the mud or cease surviving. Being a semi-intelligent creature, it chose the former course and spit out the mud.

The fish, however, apparently was very particular as to where this action was to take place. Not just any spot would do. And it so happens that the spot chosen was at the low water line immediately adjacent to the Indian encampment. This was done by every one of the several thousand mudsuckers in the lake. This was not coincidence, but rather because of many factors including water temperature, current, position of the sun and many other interrelated elements too complicated to explain.

Whatever the reasons, it doesn't alter the fact that thousands of Lake Miccosukee mudsuckers deposited a mountain of mud in the shallow water several yards away from the encampment. We can be fairly certain that such a build-up of mud did not go unnoticed by the human inhabitants there. The pieces of pottery that are unique to this site were almost certainly made from the material deposited by the mudsucker.

This was proven beyond any doubt when, in April 1968, several clay tablets were uncovered on which were inscribed drawings of a fish, which closely resembled the mudsucker, as well as pinpointed the location of the mud mound. We also learned from these tablets that pottery-making was somewhat of a religious ceremony in which certain prescribed procedures were followed.

First of all, prayers were offered to the god of all pottery makers, Mizimud (Mi ze mud). After the prayers, the mud was gathered and placed in the center of the camp where, at sundown, braves performed a ceremonial dance on the mud. After this dance, the mud was divided among the pottery makers and the formation of pottery pieces began.

This account could continue with many other fascinating stories of these ceremonies, but suffice it to say that the discovery of the Lake Miccosukee mudsucker was proven beyond any doubt through uncovering the tablets. The importance of these tablets can be attested to by this inscription which comes from the most relevant of the tablets:

When sun go down
and moon come out
braves gather round
and begin to shout
Ahay! Ahay! Mizimud!
It is good to beat feet
On Miccosukee mud. □

Hunter Education News

By Captain Ed Tyer
Coordinator for Hunter Education

1983-84 Florida Hunting Accidents

Most hunters enjoy their sport, and accidents are not on their minds when they go to the field. There were, however, 30 hunting-related accidents during the 1983-84 season which were reported to and investigated by the Game and Fresh Water Fish Commission.

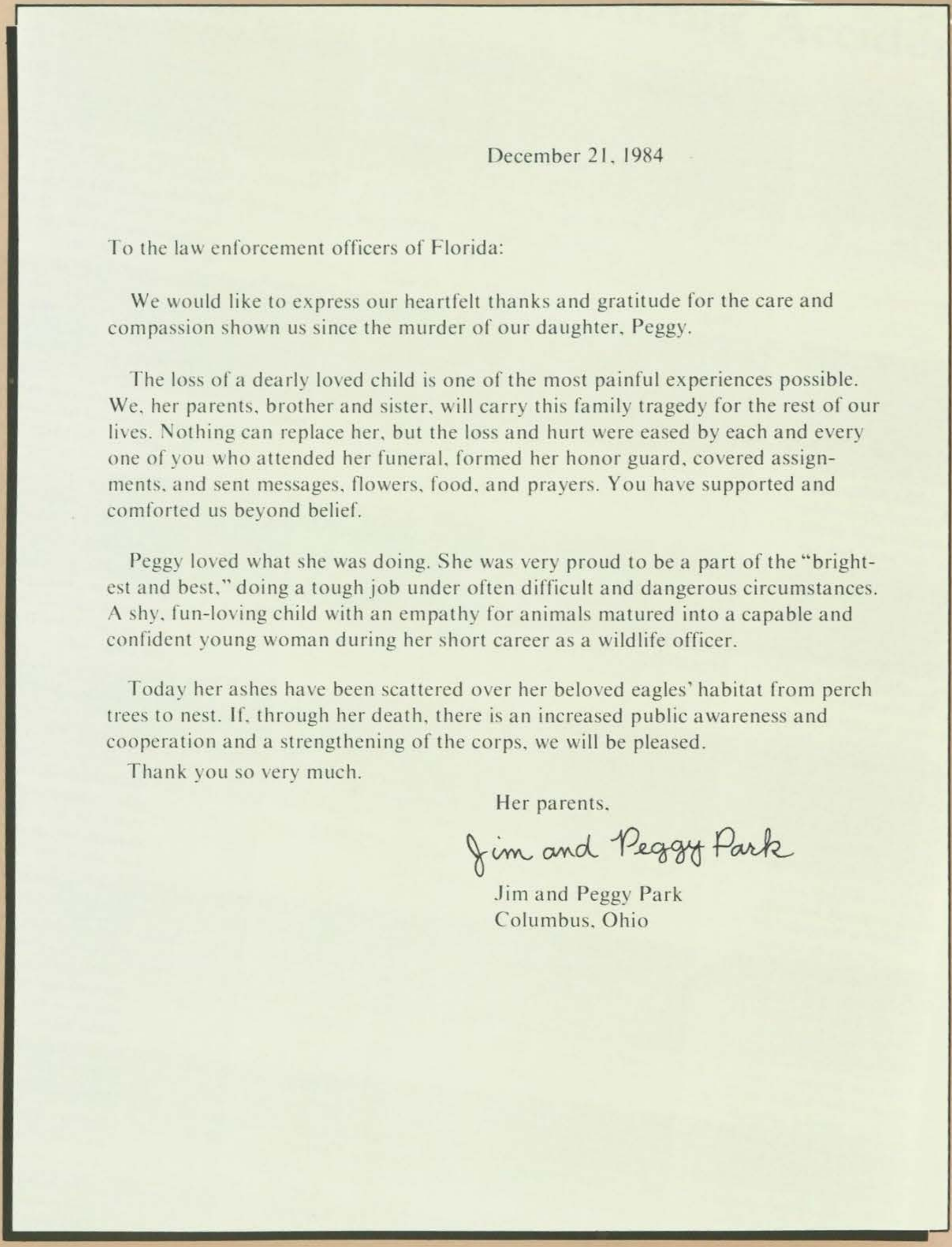
Of these, four did not include firearms. In one incident, a duck hunter stepped on a sharp stick and punctured his foot. Another hunter fell from a tree stand and broke an arm and wrist. One hunter drowned in a ditch when a truck he was riding in turned over and pinned him under it. One hunter died of hypothermia after becoming lost. Of the 26 accidents involving firearms or archery equipment, 10 were fatal. Of the ages known, only four of the shooters were under the age of 18. More than a third of the shooting accidents were self-inflicted.

Day & Date	Time	Age of Shooter	Fatal	Self-Inflicted	Type of Firearm	Muzzle Distance	Type of Game	Open Land or WMA	Region	Circumstances
1. Thursday 8/25/83	9:30 a.m.	N/A	Yes	No	Handgun	13 ft.	Wild hog	Open	S	Shooter was trying to shoot a hog that had knocked him down and attacked him. Bullet hit victim 13 ft. away.
2. Saturday 9/24/83	7:00 a.m.	37	No	No	Shotgun	21-50 yds.	Waterfowl	Open	C	Victim was in water retrieving a duck while shooter was shooting at ducks flying over. Victim was hit by shotgun pellets in right ear and right side of nose.
3. Saturday 9/24/83	3:45 p.m.	16	No	No	Bow	N/A	Deer Wild hog	Open	C	Victim was walking in front of his partner who had an arrow strung in his bow. Victim stopped, partner walked into him with arrow, cutting his left arm.
4. Saturday 10/1/83	N/A	29	No	No	Compound bow	11-20 yds.	Deer	WMA	C	Shooter saw deer move in brush. Deer went behind tree and shooter shot at movement in brush, hitting victim in right rear hip below waist.
5. Saturday 10/22/83	N/A	N/A	No	No	Black powder rifle	2-5 ft.	Deer	Open	NE	Shooter attempted to remove muzzleloader from under other equipment in bed of truck, gun discharged. Bullet hit victim in forearm.
6. Saturday 10/22/83	7:09 p.m.	47	No	Yes	Handgun	0-1 ft.	Deer	WMA	E	Victim was dismounting ATC when his handgun discharged. He received wound to upper portion of his leg.
7. Tuesday 10/25/83	7:30 p.m.	33	No	Yes	Black powder rifle	0	Deer	WMA	E	Victim was hunting from tree stand. He cocked hammer and pulled set trigger. When he was uncocking the hammer, the gun went off, hitting him in the foot.
8. Saturday 11/12/83	9:00 a.m.	28	No	Yes	Handgun	0	Deer	Open	S	Victim stepped out of vehicle. Gun which was in holster discharged, hitting victim's leg.
9. Sunday 11/13/83	7:00 a.m.	58	Yes	Yes	Shotgun	2-5 ft.	N/A	Open	NW	Victim was attempting to cross a small barbed wire fence, lost balance and accidentally discharged his shotgun, which shot him in the forehead.
10. Tuesday 11/22/83	3:30 p.m.	14	Yes	No	Shotgun	2-5 ft.	Squirrel	Open	NE	Shooter and victim were walking through a swampy area. Shooter slipped, causing gun to discharge and hit victim in back of head and neck.
11. Thursday 11/24/83	7:30 a.m.	23	No	No	Shotgun	0-1 ft.	Deer Squirrel	WMA	C	Shooter attempted to unload single barrel shotgun. Gun discharged, hitting victim in lower right leg with a slug.

Day & Date	Time	Age of Shooter	Fatal	Self-Inflicted	Type of Firearm	Muzzle Distance	Type of Game	Open Land or WMA	Region	Circumstances
12. Thursday 11/24/83	10:55 a.m.	23	Yes	No	Shotgun	84 ft.	Deer	WMA	C	As shooter was shooting at turkeys, victim raised up from behind a log and four #1 buckshot struck him in the chest.
13. Sunday 11/27/83	9:30 a.m.	64	No	No	Shotgun	30-35 yds.	Turkey	Open	NW	Turkey hunter was shot as he pursued a turkey he had shot which ran by his hunting buddy who thought the bird was escaping.
14. Tuesday 12/13/83	8:45 a.m.	39	Yes	No	Handgun	0	Hog	Open	S	Victim and hunting party were crawling in heavy palmettos looking for a wounded hog. The hog jumped out of palmettos. Victim stood up as shooter behind him shot at hog.
15. Sunday 12/18/83	7:30 a.m.	56	No	No	Rifle	0	Deer	Open	C	Victim was reaching through window of vehicle to put his rifle on seat. Rifle accidentally fired, sending bullet though passenger seat and door into calf of victim's right leg.
16. Wednesday 12/21/83	6:15 p.m.	40	No	Yes	Rifle	0	Squirrel	Open	NE	Hunter coming back from squirrel hunting attempted to climb through fence while holding onto gun. Gun discharged, hitting him in jaw and bullet came out above nose.
17. Friday 12/23/83	4:45 p.m.	20	No	Yes	Rifle	0	Rabbit Squirrel	Open	S	Victim was running through swamp area and fell down, causing gun to discharge. Bullet struck victim in top of left foot.
18. Tuesday 12/27/83	11:00 a.m.	13	Yes	No	Rifle	2-5 yds.	Nongame	Open	S	Shooter's gun accidentally discharged, hitting victim as he was swinging gun around to shoot a white egret.
19. Saturday 12/31/83	5:25 p.m.	18	Yes	No	Rifle	21-50 yds.	Deer	Open	C	Shooter was shooting at deer and hit victim instead, piercing the side of the victim. Bullet exited the other side.
20. Saturday 12/31/83	11:15 a.m.	15	No	Yes	Rifle	0			NE	As hunter was exiting a pickup truck, he tripped and pulled the trigger of his rifle, shooting himself in the lower left leg.
21. Friday 1/6/84	7:30 a.m.	30	No	Yes	Rifle	2-5 yds.	Deer	WMA	NW	Victim dropped muzzleloading rifle from tree stand, causing the rifle to discharge. Bullet entered victim in left big toe, passed through his left shin and exited just above left knee.
22. Saturday 1/7/84	12:20 p.m.	24	Yes	No	Rifle	51-100 yds.	Deer	WMA	NE	Shooter mistook victim to be a deer and shot him in the neck.
23. Sunday 1/15/84	7:45 a.m.	71	No	No	Rifle	900 ft.	Deer	WMA	NW	Victim was sitting on a ditch bank, 900 ft. away from shooter traveling in his truck. Shooter mistook victim for deer and shot victim in the upper right leg above knee.
24. Saturday 3/17/84	7:30 to 10:00 a.m.	59	Yes	Yes	Shotgun	0	Turkey	Open	NE	Victim was shot by own gun while removing it muzzle-first from his truck.
25. Saturday 3/24/84	15 mins. after sunup	N/A	No	No	Shotgun	51-100 yds.	Turkey	WMA	C	Shooter shot at turkey and hit victim beyond target.
26. Tuesday 4/3/84	1:40 p.m.	19	Yes	Yes	Shotgun	0	Raccoon	Open	NW	After consuming alcohol, victim took gun and went into woods to kill a raccoon. Victim slipped on muddy road and gun discharged, wounding victim in abdomen.

N/A = Not Available; WMA = Wildlife Management Area; Regions — S = South, NE = Northeast, NW = Northwest, E = Everglades, C = Central.

A Letter from Peggy Park's Parents



December 21, 1984

To the law enforcement officers of Florida:

We would like to express our heartfelt thanks and gratitude for the care and compassion shown us since the murder of our daughter, Peggy.

The loss of a dearly loved child is one of the most painful experiences possible. We, her parents, brother and sister, will carry this family tragedy for the rest of our lives. Nothing can replace her, but the loss and hurt were eased by each and every one of you who attended her funeral, formed her honor guard, covered assignments, and sent messages, flowers, food, and prayers. You have supported and comforted us beyond belief.

Peggy loved what she was doing. She was very proud to be a part of the "brightest and best," doing a tough job under often difficult and dangerous circumstances. A shy, fun-loving child with an empathy for animals matured into a capable and confident young woman during her short career as a wildlife officer.

Today her ashes have been scattered over her beloved eagles' habitat from perch trees to nest. If, through her death, there is an increased public awareness and cooperation and a strengthening of the corps, we will be pleased.

Thank you so very much.

Her parents,

Jim and Peggy Park

Jim and Peggy Park
Columbus, Ohio

William Greer-Photograph

Margaret Elizabeth "Peggy" Park

Protecting Nature Was Everything To Her

Even when she was a child, Margaret Elizabeth "Peggy" Park knew her place was with nature. She lived, played and worked amid the wonders of the outdoors.

And that's where, on December 13, 1984, the 26-year-old wildlife officer died.

Wildlife Officer Park was shot and killed while on routine patrol in rural northeastern Pinellas County. She died next to her patrol vehicle, its bluelights still flashing.

Two Pasco County men were arrested on December 25 and charged with first-degree murder in the case. According to the Pinellas County Sheriff's Office, Martin Edward Grossman, 19, and Thayne Nathan Taylor, 17, allegedly were in a van stopped by Officer Park around 8:18 p.m.

Investigators believe that after she arrested Grossman, a struggle ensued and she was overpowered. Although she was apparently struck in the head with her flashlight, Officer Park radioed a call for assistance before she was shot.

The daughter of Columbus, Ohio educators, Park is remembered for her deep, abiding love for all wild animals, especially endangered species. Most of all, she loved bald eagles, recall the people who knew and worked with her. She liked to tell others she knew every bald eagle's nest in northern Pinellas County.

Pinellas County had been her home since her graduation in 1982 from the wildlife officer training academy. There she lived in a lakeside trailer in Palm Harbor along Booker Creek with her two cats and two dogs.

In accordance with her family's wishes, Officer Park's body was cremated and the ashes scattered near the eagle nests she loved and protected.

Peggy Park grew up in a close-knit family that vacationed in Canada. Her friends remembered her talking about walking miles and miles through the wilderness, soaking in the glories of nature.

She decided early that her future was to be involved with the outdoors. After graduating from Bexley High School in Columbus in 1977, she enrolled at Ohio State University where she earned her bachelor's degree in natural resources in 1981, specializing in wildlife management.

On September 7, 1982, she attained her life's dream when she was hired as a wildlife officer with the Game and Fresh Water Fish Commission. Fresh out of college and full of enthusiasm, she impressed the screening committee that selects wildlife officers. Her love for nature and the outdoors clearly came across during the interviews. The interviewers felt she had the drive to be a first-class wildlife officer, and they were right.

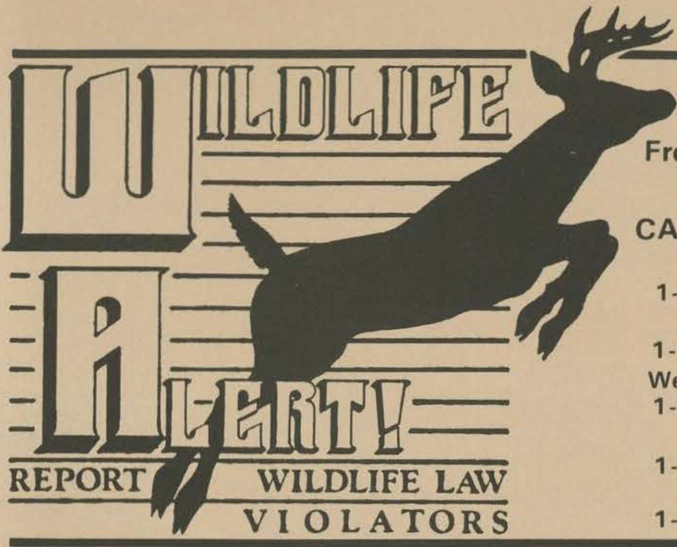
"She passed everything at the academy with flying colors," remembered Lt. Colonel Brantley Goodson, director of the Division of Law Enforcement. From there she was assigned to Pinellas County where there is little hunting but a lot of wildlife that needs protection.

"And she protected it as best she could," Goodson said. "Protecting nature was everything to her and she had little patience with people who litter. She wrote lots of littering citations."

While at the academy, Officer Park talked about the dangers of being a wildlife officer from time to time with her classmates.

"We talked about it, but we didn't dwell on it," one close friend said. "Even so, she was a careful person."

"Officer Park excelled in many ways," Goodson said. "She gained the respect of the people in that area of the state. Everyone knew that when they were dealing with her, they were dealing with a dedicated professional." ☐



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Floridana

For more than a decade, Sarasota's first postal carrier delivered mail without making a mistake, even though he could not read or write.

Around the turn of the century, pioneer mailman Thomas Broadway held a contract to deliver mail on three routes. Sarasota's postmistress at the time, Carrie S. Abbe, lined up everything for him, and Broadway used his own unique system to distinguish one letter from another.

"Mail for Charley Thompson was carried in a left pocket and my father's in the right," photographer Bill Neubauer of Sarasota once said. "As the need arose," Neubauer explained, "more pockets were added. When Broadway resigned after 13 years, his coat was completely covered with pockets. He was never known to have made a mistake in mail delivery during those years."

Broadway dispatched the mail with the help of a two-horse team and a surrey with fringe on top. Sometimes he hauled passengers on the dusty route from Sarasota to Bradenton.

Besides this run, there was slow but sure delivery on the route to Old Myakka in Sarasota's back country, and to Venice along Sarasota's southern Gulf Coast.

Whenever Shakit Creek at Venice became flooded, the mailman would unhook his Mexican horse "Dick" from his buggy and ride him through the swollen, alligator-infested stream and on to Venice.

Neither heat nor cold nor even alligators could stay this frontier mailman from his appointed rounds. During the winter of 1894-95, when temperatures twice plummeted to the teens in south Florida, Broadway "like to froze to death" but continued driving his buggy to Venice to finish his deliveries.

—Marian B. Godown

Your $1 contribution helps Florida's nongame wildlife!

When you register your motor vehicles and buy tags at any Florida county tax collector's office or agency, you have the option of paying $1 more which will go directly to the Nongame Wildlife Trust Fund.

Game & Fresh Water Fish Commission
Florida